```
     FILE 'REGISTRY' ENTERED AT 14:24:56 ON 02 OCT 2009
L1             STRUCTURE UPLOADED
L2           50 S L1
L3         3215 S L1 SSS FULL
L4             STRUCTURE UPLOADED
L5           48 S L4
L6          939 S L4  SUB=L3 FULL
L7         2276 S L3 NOT L6
L8         2276 S L7

     FILE 'HCAPLUS' ENTERED AT 14:26:34 ON 02 OCT 2009
L9          831 S L7
L10         717 S L9 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'STNGUIDE' ENTERED AT 14:27:11 ON 02 OCT 2009

     FILE 'REGISTRY' ENTERED AT 14:28:06 ON 02 OCT 2009
L11            STRUCTURE UPLOADED
L12          45 S L11
L13         970 S L11  SUB=L3 FULL
L14        1306 S L7 NOT L13

     FILE 'HCAPLUS' ENTERED AT 14:28:53 ON 02 OCT 2009
L15         446 S L14
L16         389 S L15 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'STNGUIDE' ENTERED AT 14:29:19 ON 02 OCT 2009

     FILE 'HCAPLUS' ENTERED AT 14:30:10 ON 02 OCT 2009
L17       13344 S MONOSACCHARIDE
L18          18 S L16 AND L17

     FILE 'REGISTRY' ENTERED AT 15:07:09 ON 02 OCT 2009
L19            STRUCTURE UPLOADED
L20           0 S L19
L21           3 S L19  SUB=L14 FULL

     FILE 'HCAPLUS' ENTERED AT 15:08:39 ON 02 OCT 2009
L22           2 S L21

     FILE 'REGISTRY' ENTERED AT 15:30:27 ON 02 OCT 2009
L23            STRUCTURE UPLOADED
L24            STRUCTURE UPLOADED
L25           3 S L24
L26          16 S L24 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 15:33:18 ON 02 OCT 2009
L27          12 S L26
```

```
=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.22       0.22

FILE 'REGISTRY' ENTERED AT 14:24:56 ON 02 OCT 2009
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STRUCTURE FILE UPDATES:    1 OCT 2009  HIGHEST RN 1187162-65-7
DICTIONARY FILE UPDATES:   1 OCT 2009  HIGHEST RN 1187162-65-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

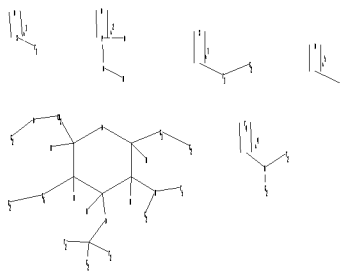
TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

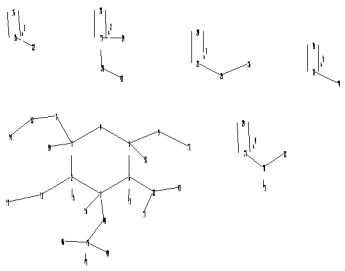
  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10524048generic.str
```





chain nodes :
7 9 11 12 13 15 16 17 18 19 20 22 23 24 25 26 27 29 30 31 32
33 34 35 41 43 44 45 46 47 49 51 52 53 54 55 56 57 58 59
ring nodes :
1 2 3 4 5 6
chain bonds :
1-44 1-56 2-51 2-55 3-7 3-59 5-9 5-58 6-12 6-57 7-52 9-11 12-13 12-43
15-16 15-22 17-18 17-19 17-20 20-41 23-24 23-25 25-26 27-29 27-30 30-31
30-32 33-34
33-35 44-45 45-46 45-47 45-49 51-53 52-54
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 1-44 2-3 2-51 3-4 4-5 5-6 5-9 6-12 9-11 12-13 12-43 15-16
15-22
17-19 23-24 23-25 25-26 27-29 27-30 30-31 30-32 33-35 44-45 45-46 45-47
45-49 51-53
52-54
exact bonds :
1-56 2-55 3-7 3-59 5-58 6-57 7-52 20-41 33-34
normalized bonds :
17-18 17-20

G1:O,S

```
G2:C,H

G3:C,H,N

G4:O,S,NH

G5:[*1],[*2],[*3],[*4],[*5]

G6:O,N

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  9:CLASS  11:CLASS  12:CLASS
13:CLASS  15:CLASS  16:CLASS  17:CLASS  18:CLASS  19:CLASS  20:CLASS  22:CLASS
23:CLASS  24:CLASS
25:CLASS  26:CLASS  27:CLASS  29:CLASS  30:CLASS  31:CLASS  32:CLASS  33:CLASS
34:CLASS  35:CLASS
41:CLASS  43:CLASS  44:CLASS  45:CLASS  46:CLASS  47:CLASS  49:CLASS  51:CLASS
52:CLASS  53:CLASS
54:CLASS  55:CLASS  56:CLASS  57:CLASS  58:CLASS  59:CLASS



L1      STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 14:25:23 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     2203 TO ITERATE

 90.8% PROCESSED     2000 ITERATIONS                              50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         41245 TO    46875
PROJECTED ANSWERS:             2553 TO     4099

L2           50 SEA SSS SAM L1

=> d l1
L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

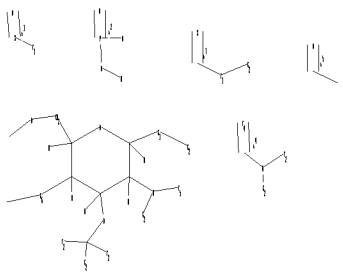
Structure attributes must be viewed using STN Express query preparation.

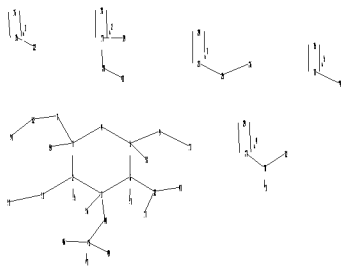

=> s l1 sss full
FULL SEARCH INITIATED 14:25:34 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    44234 TO ITERATE

100.0% PROCESSED    44234 ITERATIONS                            3215 ANSWERS
SEARCH TIME: 00.00.01

L3         3215 SEA SSS FUL L1

=>
Uploading C:\Program Files\STNEXP\Queries\10524048not.str
```





chain nodes :
7 9 11 12 13 15 16 17 18 19 20 22 23 24 25 26 27 29 30 31 32
33 34 35 41 43 44 45 46 47 49 51 52 53 54 55 56 57 58 59
ring nodes :
1 2 3 4 5 6
chain bonds :
1-44 1-56 2-51 2-55 3-7 3-59 5-9 5-58 6-12 6-57 7-52 9-11 12-13 12-43
15-16 15-22 17-18 17-19 17-20 20-41 23-24 23-25 25-26 27-29 27-30 30-31
30-32 33-34
33-35 44-45 45-46 45-47 45-49 51-53 52-54
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 1-44 2-3 2-51 3-4 4-5 5-6 5-9 6-12 9-11 12-13 12-43 15-16
15-22
17-19 23-24 23-25 25-26 27-29 27-30 30-31 30-32 33-35 44-45 45-46 45-47
45-49 51-53
52-54
exact bonds :
1-56 2-55 3-7 3-59 5-58 6-57 7-52 20-41 33-34
normalized bonds :
17-18 17-20

G1:O,S

```
G2:C,H

G3:C,H,N

G4:O,S,NH

G5:[*1],[*2],[*3],[*4],[*5]

G6:O,N

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  9:CLASS  11:CLASS  12:CLASS
13:CLASS  15:CLASS  16:CLASS  17:CLASS  18:CLASS  19:CLASS  20:CLASS  22:CLASS
23:CLASS  24:CLASS
25:CLASS  26:CLASS  27:CLASS  29:CLASS  30:CLASS  31:CLASS  32:CLASS  33:CLASS
34:CLASS  35:CLASS
41:CLASS  43:CLASS  44:CLASS  45:CLASS  46:CLASS  47:CLASS  49:CLASS  51:CLASS
52:CLASS  53:CLASS
54:CLASS  55:CLASS  56:CLASS  57:CLASS  58:CLASS  59:CLASS



L4      STRUCTURE UPLOADED

=> s l4
SAMPLE SEARCH INITIATED 14:26:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     1171 TO ITERATE

100.0% PROCESSED     1171 ITERATIONS                              48 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        21368 TO    25472
PROJECTED ANSWERS:             545 TO     1375

L5           48 SEA SSS SAM L4

=> s l4 sub=l3
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 14:26:12 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -      974 TO ITERATE

100.0% PROCESSED      974 ITERATIONS                             939 ANSWERS
SEARCH TIME: 00.00.01

L6          939 SEA SUB=L3 SSS FUL L4

=> s l3 not l6
L7        2276 L3 NOT L6

=> file hcpalus
'HCPALUS' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'REGISTRY'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
```

```
=> s l7
L8        2276 L3 NOT L6

=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     230.84     231.06

FILE 'HCAPLUS' ENTERED AT 14:26:34 ON 02 OCT 2009
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FILE COVERS 1907 - 2 Oct 2009  VOL 151 ISS 15
FILE LAST UPDATED: 1 Oct 2009  (20091001/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Aug 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate
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The ALL, BIB, MAX, and STD display formats in the CA/CAplus family
of databases have been updated to include new citing references
information.  This enhancement may impact record import into
database management software.  For additional information, refer
to NEWS 9.

=> s l7
L9          831 L7

=> s l9 and (PY<2003 or AY<2003 or PRY<2003
UNMATCHED LEFT PARENTHESIS 'AND (PY<2003'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> s l9 and (PY<2003 or AY<2003 or PRY<2003)
      22985376 PY<2003
       4511599 AY<2003
       3981384 PRY<2003
L10         717 L9 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
```

```
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    2.85     233.91

FILE 'STNGUIDE' ENTERED AT 14:27:11 ON 02 OCT 2009
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> file registry
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    0.14     234.05

FILE 'REGISTRY' ENTERED AT 14:28:06 ON 02 OCT 2009
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STRUCTURE FILE UPDATES:    1 OCT 2009  HIGHEST RN 1187162-65-7
DICTIONARY FILE UPDATES:   1 OCT 2009  HIGHEST RN 1187162-65-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
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experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10524048not2.str
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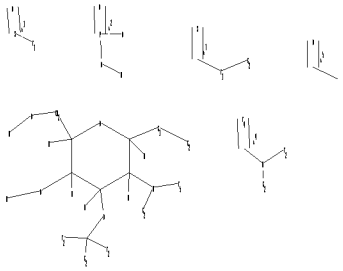

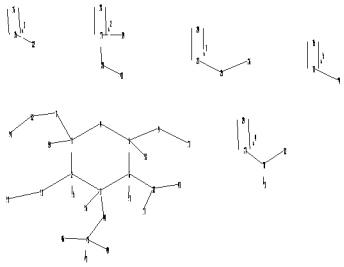

chain nodes :
7 9 11 12 13 15 16 17 18 19 20 22 23 24 25 26 27 29 30 31 32
33 34 35 41 43 44 45 46 47 49 51 52 53 54 55 56 57 58 59
ring nodes :
1 2 3 4 5 6
chain bonds :
1-44 1-56 2-51 2-55 3-7 3-59 5-9 5-58 6-12 6-57 7-52 9-11 12-13 12-43
15-16 15-22 17-18 17-19 17-20 20-41 23-24 23-25 25-26 27-29 27-30 30-31
30-32 33-34
33-35 44-45 45-46 45-47 45-49 51-53 52-54
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 1-44 2-3 2-51 3-4 4-5 5-6 5-9 6-12 9-11 12-13 12-43 15-16
15-22
17-19 23-24 23-25 25-26 27-29 27-30 30-31 30-32 33-35 44-45 45-46 45-47
45-49
exact bonds :
1-56 2-55 3-7 3-59 5-58 6-57 7-52 20-41 33-34 51-53 52-54
normalized bonds :
17-18 17-20

G1:O,S

G2:C,H

G3:C,H,N

G4:O,S,NH

G5:[*1],[*2],[*3],[*4],[*5]

G6:O,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 11:CLASS 12:CLASS
13:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS
23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS
34:CLASS 35:CLASS
41:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS 47:CLASS 49:CLASS 51:CLASS
52:CLASS 53:CLASS
54:CLASS 55:CLASS 56:CLASS 57:CLASS 58:CLASS 59:CLASS

L11   STRUCTURE UPLOADED

=> s l11
SAMPLE SEARCH INITIATED 14:28:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   2170 TO ITERATE

 92.2% PROCESSED   2000 ITERATIONS   45 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 40606 TO   46194
PROJECTED ANSWERS: 557 TO   1395

L12   45 SEA SSS SAM L11

=> s l11 sub=l3
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 14:28:35 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -   3203 TO ITERATE

100.0% PROCESSED   3203 ITERATIONS   970 ANSWERS
SEARCH TIME: 00.00.01

L13   970 SEA SUB=L3 SSS FUL L11

=> s l7 not l13
L14   1306 L7 NOT L13

=> file hcaplus
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                         ENTRY   SESSION
FULL ESTIMATED COST   44.48   278.53

FILE 'HCAPLUS' ENTERED AT 14:28:53 ON 02 OCT 2009
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FILE COVERS 1907 - 2 Oct 2009 VOL 151 ISS 15
FILE LAST UPDATED: 1 Oct 2009 (20091001/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family
of databases have been updated to include new citing references
information. This enhancement may impact record import into
database management software. For additional information, refer
to NEWS 9.

```
=> s l14
L15        446 L14

=> s l15 and (PY<2003 or AY<2003 or PRY<2003)
      22985376 PY<2003
       4511599 AY<2003
       3981384 PRY<2003
L16        389 L15 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   2.85     281.38

FILE 'STNGUIDE' ENTERED AT 14:29:19 ON 02 OCT 2009
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.07     281.45

FILE 'HCAPLUS' ENTERED AT 14:30:10 ON 02 OCT 2009
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FILE COVERS 1907 - 2 Oct 2009 VOL 151 ISS 15
FILE LAST UPDATED: 1 Oct 2009 (20091001/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family
of databases have been updated to include new citing references
information. This enhancement may impact record import into
database management software. For additional information, refer
to NEWS 9.

```
=> s monosaccharide
L17      13344 MONOSACCHARIDE

=> s l16 and l17
L18         18 L16 AND L17

=> d l18 1-18 ti abs bib hitstr
```

L18 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN

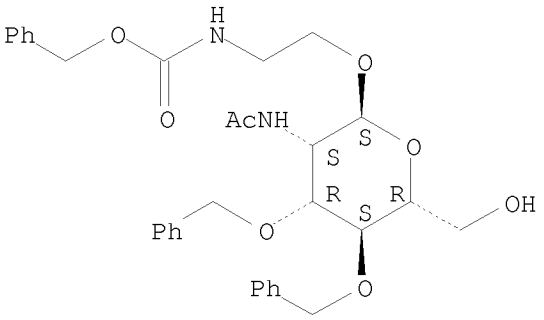
TI Towards a synthetic glycoconjugate vaccine against Neisseria meningitidis A

AB Albumin conjugates of synthetic fragments of the capsular polysaccharide of the Gram-neg. bacterium Neisseria meningitidis serogroup A were prepared The fragments include monosaccharides α-D-ManpNAc-(1→O)-(CH2)2NH2 and 6-O-P(O)(O-)2-α-D-ManpNAc-(1→O)-(CH2)2NH2, disaccharide α-D-ManpNAc-[1→O-P(O)(O-)→6]-α-D-ManpNAc-(1→O)-(CH2)2NH2, and trisaccharide α-D-ManpNAc-[1→O-P(O)(O-)→6]-α-D-ManpNAc-[1→O-P(O)(O-)→6]-α-D-ManpNAc-(1→O)-(CH2)2NH2. Two monosaccharide blocks were employed as key intermediates. The reducing-end mannose unit featured the NHAc group at C-2, and contained the aminoethyl spacer as the aglycon for the final bioconjugation. The inter-residual phosphodiester linkages were fashioned from an anomerically positioned H-phosphonate group in a 2-azido-mannose

building block. The spacer-linked saccharides were N-acylated with hepta-4,6-dienoic acid and the resulting conjugated diene-equipped saccharides were subjected to Diels - Alder-type addition with maleimidobutyryl-group functionalized human serum albumin to form covalent conjugates containing up to 26 saccharide haptens per albumin mol. Complete 1H, 13C, and 31P NMR assignments are given. Antigenicity of the neoglycoconjugates was demonstrated by a double immunodiffusion assay which indicated that a fragment as small as a monosaccharide is recognized by a polyclonal meningococcus group A antiserum and that the O-acetyl group(s) present in the natural capsular material is not essential for antigenicity.

AN 2002:806294 HCAPLUS <<LOGINID::20091002>>
DN 138:170432
TI Towards a synthetic glycoconjugate vaccine against Neisseria meningitidis A
AU Berkin, Ali; Coxon, Bruce; Pozsgay, Vince
CS Laboratory of Developmental and Molecular Immunity, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD, 20892-2720, USA
SO Chemistry--A European Journal (2002), 8(19), 4424-4433
CODEN: CEUJED; ISSN: 0947-6539
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
OS CASREACT 138:170432
IT 497096-20-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antigenicity of human serum albumin conjugates of synthetic fragments of the capsular polysaccharide of Neisseria meningitidis)
RN 497096-20-5 HCAPLUS
CN Carbamic acid, N-[2-[[2-(acetylamino)-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-mannopyranosyl]oxy]ethyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



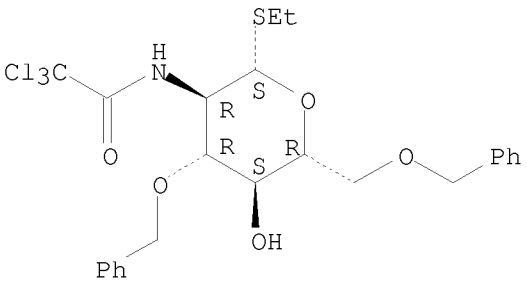
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Study of glycosylation with N-trichloroacetyl-D-glucosamine derivatives in the syntheses of the spacer-armed pentasaccharides sialyl lacto-N-neotetraose and sialyl lacto-N-tetraose, their fragments, and analogues
AB The syntheses of 2-aminoethyl glycosides of the pentasaccharides

Neu5Ac-α(2→3)-Gal-β(1→4)-GlcNAc-
β(1→3)-Gal-β(1→4)-Glc and
Neu5Ac-α(2→3)-Gal-β(1→3)-GlcNAc-
β(1→3)-Gal-β(1→4)-Glc, their asialo di-, tri-, and
tetrasaccharide fragments, and analogs included a systematic study of
glycosylation with variously protected mono- and disaccharide donors
derived from N-trichloroacetyl-D-glucosamine of galactose, lactose, and
lactosamine glycosyl acceptors bearing benzoyl protection around the OH
group to be glycosylated. Despite the low reactivity of these acceptors,
stereospecificity and good to excellent yields were obtained with
NIS-TfOH-activated thioglycoside donors of such type, or with
AgOTf-activated glycosyl bromides, while other promoters, as well as a
trichloroacetimidate donor, were less effective, and a β-acetate
donor was inactive. In NIS-TfOH-promoted glycosylation with the
thioglycosides, the use of TfOH in catalytic amount led to rapid formation
of the corresponding oxazoline, but the quantity of TfOH necessary for
further efficient coupling with an acceptor depended on the reactivity of
the donor, varying from 0.07 equiv for a 3,6-di-O-benzylated
monosaccharide derivative to 2.1 equiv for a peracetylated
disaccharide one. In the glycosylation products, the N-trichloroacetyl
group was easily converted into N-acetyl by alkaline hydrolysis followed by
N-acetylation.

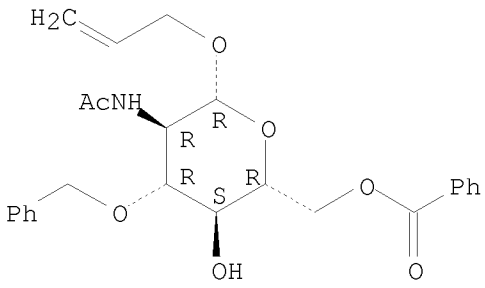
AN 2001:780036 HCAPLUS <<LOGINID::20091002>>
DN 136:184030
TI Study of glycosylation with N-trichloroacetyl-D-glucosamine derivatives in the syntheses of the spacer-armed pentasaccharides sialyl lacto-N-neotetraose and sialyl lacto-N-tetraose, their fragments, and analogues
AU Sherman, Andrei A.; Yudina, Olga N.; Mironov, Yury V.; Sukhova, Elena V.; Shashkov, Alexander S.; Menshov, Vladimir M.; Nifantiev, Nikolay E.
CS N.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Moscow, 119991, Russia
SO Carbohydrate Research (2001), 336(1), 13-46
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 136:184030
IT 399035-90-6P 399036-09-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(study of glycosylation with N-trichloroacetylD-glucosamine derivs. in the syntheses of spacer-armed pentasaccharides)
RN 399035-90-6 HCAPLUS
CN β-D-Glucopyranoside, ethyl 2-deoxy-3,6-bis-O-(phenylmethyl)-1-thio-2-[(trichloroacetyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 399036-09-0 HCAPLUS
CN β-D-Glucopyranoside, 2-propen-1-yl
2-(acetylamino)-2-deoxy-3-O-(phenylmethyl)-, 6-benzoate (CA INDEX NAME)

Absolute stereochemistry.

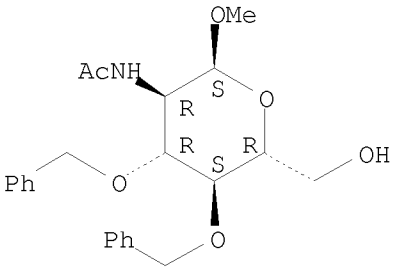


OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI DISAL glycosyl donors for efficient glycosylations under acidic conditions: Application to solid-phase oligosaccharide synthesis
AB The use of DISAL (Me dinitrosalicylate) glycosyl donors in efficient Lewis acid-promoted glycosylations is reported. N-Acetyl-d-glucosamine monosaccharide acceptors are successfully glycosylated at O-6 or O-4 using benzyl- and benzoyl-protected DISAL donors in CH2Cl2 or nitromethane in the presence of LiClO4. The resultant disaccharides are isolated in yields ranging from 35 to 93%. Other Lewis acids such as FeCl3, TMSOTf, or BF3·Et2O also prove efficient for glycosylation of the secondary alc. cyclohexanol. However, for the synthesis of disaccharides, the mild activation by LiClO4 gives higher yields. This approach is extended to efficient solid-phase glycosylation of a d-glucosamine derivative anchored by the 2-amino group through a Backbone Amide Linker (BAL) to a polystyrene support.
AN 2001:694208 HCAPLUS <<LOGINID::20091002>>
DN 136:86011
TI DISAL glycosyl donors for efficient glycosylations under acidic conditions: Application to solid-phase oligosaccharide synthesis
AU Petersen, Lars; Jensen, Knud J.
CS Department of Chemistry, Technical University of Denmark, Kemitorvet, Kgs. Lyngby, DK-2800, Den.
SO Journal of the Chemical Society, Perkin Transactions 1 (2001), (18), 2175-2182
CODEN: JCSPCE; ISSN: 1472-7781
PB Royal Society of Chemistry
DT Journal
LA English
OS CASREACT 136:86011
IT 69892-52-0P 85193-92-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(use of Me dinitrosalicylate (DISAL) glycosyl donors for efficient glycosylations under acidic conditions and its application to solid-phase oligosaccharide synthesis)
RN 69892-52-0 HCAPLUS
CN α-D-Glucopyranoside, methyl 2-(acetylamino)-2-deoxy-3,4-bis-O-

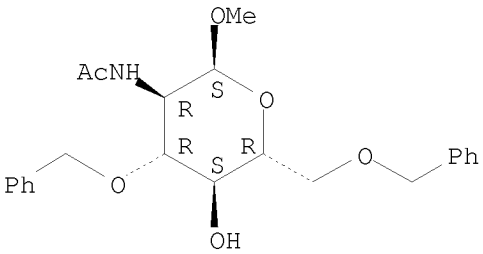
(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



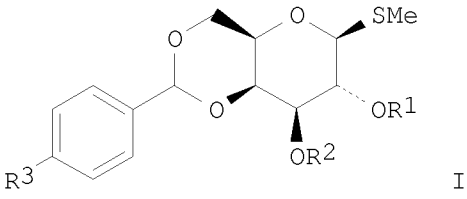
RN 85193-92-6 HCAPLUS
CN α-D-Glucopyranoside, methyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Methods for solid phase synthesis of α-D-Gal-(1,3)-Gal-containing oligosaccharides
GI



I

AB This invention relates to reagents and methods for synthesis of biol. active di- and tri-saccharides comprising α-D-Gal(1,3)-D-Gal. In particular the invention provides novel reagents, intermediates and

processes for the solution or solid phase synthesis of α-D-galactopyranosyl-(1,3)-D-galactose, and derivs. thereof. In one preferred embodiments the invention provides a protected monosaccharide building block of general formula (II): in which R3 is methoxy or methyl; R1 is H, benzoyl, pivaloyl, , 4-chlorobenzoyl, acetyl, chloroacetyl, levulinoyl, 4-methylbenzoyl, benzyl, 3,4-methylenedioxybenzyl, 4-methoxybenzyl, 4-chlorobenzyl, 4-acetamidobenzyl, or 4-azidobenzyl; and R2 is H, Fmoc, benzoyl, pivaloyl, 4-chlorobenzoyl, acetyl, chloroacetyl, levulinoyl, 4-methylbenzoyl, benzyl, 3,4-methylenedioxybenzyl, 4-methoxybenzyl, 4-chlorobenzyl, 4-acetamidobenzyl, or 4-azidobenzyl. Thus, 1-N-[3-(carboxymethylthio)propyl]-1-N'-ureido-2-acetamido-2-deoxy-4-O-[3-O-(α-D-galactopyranosyl)-D-galactopyranosyl]-D-glucopyranoside was prepared and coupled to sepharose or silica resins in preparation of oligosaccharides.

AN 2001:526085 HCAPLUS <<LOGINID::20091002>>

DN 135:92799

TI Methods for solid phase synthesis of α-D-Gal-(1,3)-Gal-containing oligosaccharides

IN Bornaghi, Laurent; Dekany, Gyula; Drinnan, Nicholas Barry; Papageorgiou, John; West, Michael Leo

PA Alchemia Pty. Ltd., Australia

SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001051499	A1	20010719	WO 2001-AU28	20010112 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2396966	A1	20010719	CA 2001-2396966	20010112 <--
	EP 1257558	A1	20021120	EP 2001-901031	20010112 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	HU 2002004225	A2	20030528	HU 2002-4225	20010112 <--
	JP 2003519628	T	20030624	JP 2001-551083	20010112 <--
	US 20040058888	A1	20040325	US 2002-181027	20021211 <--
PRAI	AU 2000-5073	A	20000113 <--		
	AU 2000-9734	A	20000829 <--		
	WO 2001-AU28	W	20010112 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

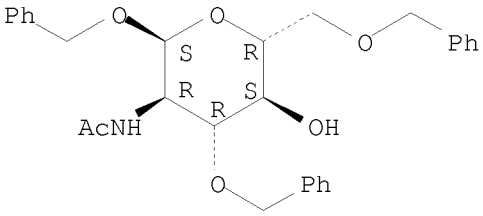
OS MARPAT 135:92799

IT 55287-49-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(methods for solid phase synthesis of α-D-Gal-(1→3)-Gal-containing oligosaccharides)

RN 55287-49-5 HCAPLUS

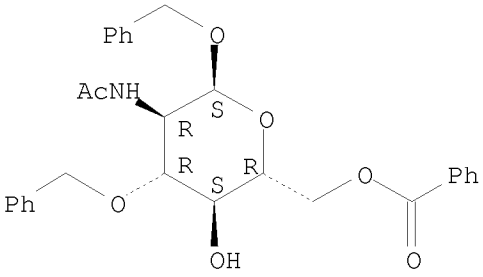
CN α-D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



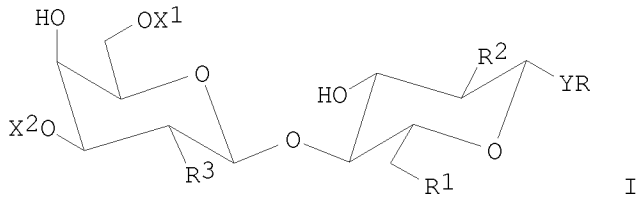
IT 55287-50-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods for solid phase synthesis of α-D-Gal-(1→3)-Gal-containing oligosaccharides)
RN 55287-50-8 HCAPLUS
CN α-D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3-O-(phenylmethyl)-, 6-benzoate (CA INDEX NAME)

Absolute stereochemistry.

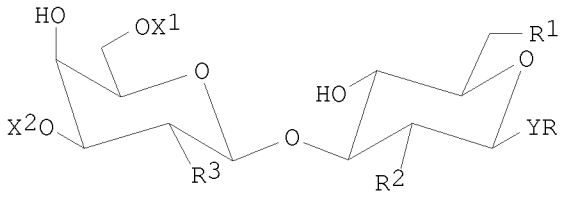


OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

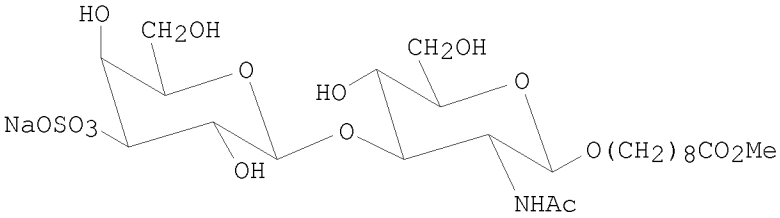
L18 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Immunosuppressive and tolerogenic modified Lewisc and LacNac compounds
GI



I



II



III

AB Novel LewisC and LacNAc analogs I and II [R = H, monosaccharide, oligosaccharide, glycoside; R1 = (un)substituted NH2, OH, sulfinyl, sulfonyl, N3, sulfate; R2 = (un)substituted NH2, OH, N3; R3 = H, F, OH, sulfate; X1 = H, sialyl, sulfate, phosphate, carboxyalkyl; X2 = H, sulfate, phosphate, carboxyalkyl; Y = O, S, NH] were prepared for use as immunosuppressants. Thus, the Lewisc derivative III at 100 μg caused 59% decrease in inflammation in the mouse footpad swelling test.

AN 1994:436117 HCAPLUS <<LOGINID::20091002>>
DN 121:36117
OREF 121:6699a,6702a

TI Immunosuppressive and tolerogenic modified Lewisc and LacNac compounds

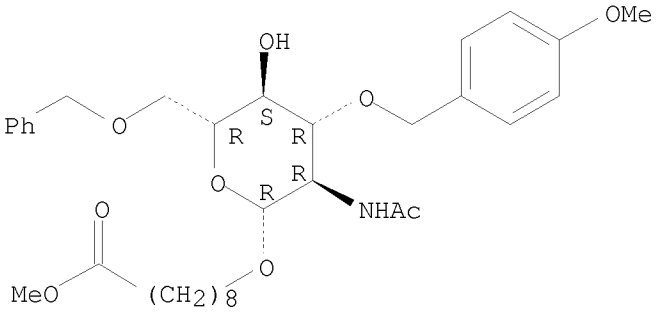
IN Ippolito, Robert M.; Haque, Wasimul; Jiang, Cong; Hanna, H. Rizk; Venot, Andre P.; Nikrad, Pandurang V.; Kashem, Mohammed A.; Smith, Richard H.; Srivastava, Om P.
PA Alberta Research Council, Can.

SO PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9324506	A1	19931209	WO 1993-US4995	19930526 <--
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 643718	A1	19950322	EP 1993-914163	19930526 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 07507319	T	19950810	JP 1993-500739	19930526 <--
	US 5580858	A	19961203	US 1994-337461	19941104 <--
	US 5646123	A	19970708	US 1995-405785	19950317 <--
PRAI	US 1992-889017	A	19920526 <--		
	US 1992-895930	A	19920609 <--		
	US 1992-988254	A1	19921209 <--		

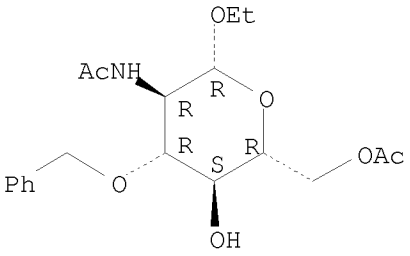
US 1991-714161 A2 19910610 <--
US 1992-988518 B1 19921210 <--
WO 1993-US4995 W 19930526 <--
US 1993-81214 B1 19930625 <--
OS MARPAT 121:36117
IT 152480-29-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of Lewisc and LacNac derivs.)
RN 152480-29-0 HCAPLUS
CN Nonanoic acid, 9-[[2-(acetylamino)-2-deoxy-3-O-[(4-methoxyphenyl)methyl]-6-O-(phenylmethyl)-β-D-glucopyranosyl]oxy]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.



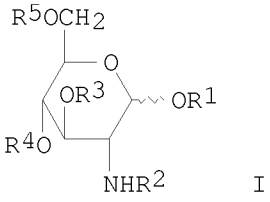
IT 152480-57-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 152480-57-4 HCAPLUS
CN β-D-Glucopyranoside, ethyl 2-(acetylamino)-2-deoxy-3-O-(phenylmethyl)-, 6-acetate (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation of lipid A monosaccharide analogs as immunostimulants and antitumor agents.
GI



I

AB The title compds. [I; one of R1,R4 = H, P(O)(OH)2, protecting group; the other = P(O)(OH)2; one of R2,R3 = (halo-, HO-, or C6-20 aliphatic acyloxy-substituted) C6-20 aliphatic acyl and the other = halo-, HO-, or C6-20 aliphatic acyloxy-substituted C6-20 aliphatic acyl, (halo-, HO-, or C6-20 aliphatic acyloxy-substituted) C6-20 alkyl], possessing macrophage-activating activity (no data), are prepared Thus, amidation of I (R1 = allyl, R2 = R3 = H, R4R5 = CMe2) (preparation given) with (R)-3-benzyloxymyristic acid in CH2Cl2 containing DCC followed by esterification with (±)-syn-2-fluoro-3-benzyloxycarboxyloxymyristic acid in CH2Cl2 containing DCC and 4-dimethylaminopyridine gave I [R1 = allyl, R2 = (R)-Me(CH2)10CH(OCH2Ph)CH2CO, R3 = (±)-Me(CH2)10CH(OCO2CH2Ph)CHFCO, R4R5 = CMe2]. The latter was treated with 1,5-cyclooctadiene-bis[methyldiphenylphosphine]iridium hexafluorophosphate and then H2, iodine, and pyridine to give I (R1 = H; R2-R5 = same as above) which was phosphorylated with (PhCH2O)2P(O)Cl in THF in the presence of BuLi followed by hydrogenolysis over 10% Pd/C to give I [R1 = P(O)(OH)2, R2 = (R)-Me(CH2)10CH(OH)CH2CO, R3 = (±)-Me(CH2)10CH(OH)CHFCO, R4 = R5 = H]. Addnl. 19 I were prepared

AN 1992:59901 HCAPLUS <<LOGINID::20091002>>
DN 116:59901
OREF 116:10385a,10388a

TI Preparation of lipid A monosaccharide analogs as immunostimulants and antitumor agents.

IN Shiosaki, Masao; Ishida, Noboru; Kobayashi, Tomoo; Hiraoka, Tetsuo; Akamatsu, Minoru; Nishijima, Masahiro
PA Sankyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 54 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02256697	A	19901017	JP 1989-321153	19891211 <--
	JP 2839921	B2	19981224		
	DD 295854	A5	19911114	DD 1990-342041	19900625 <--
	SU 1836378	A3	19930823	SU 1990-4830600	19900625 <--
	CN 1052481	A	19910626	CN 1990-106805	19900626 <--
	CN 1029405	C	19950802		
	HU 55793	A2	19910628	HU 1990-3991	19900626 <--
	HU 217114	B	19991129		
	CZ 285583	B6	19990915	CZ 1990-3185	19900626 <--
	CA 2019972	A1	19910611	CA 1990-2019972	19900627 <--
	CA 2019972	C	20000808		
	EP 437016	A2	19910717	EP 1990-307045	19900627 <--
	EP 437016	B1	19960501		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	AT 137504	T	19960515	AT 1990-307045	19900627 <--

	ES 2088970	T3	19961001	ES 1990-307045	19900627 <--
	KR 187302	B1	19990401	KR 1990-9570	19900627 <--
	RU 2076107	C1	19970327	RU 1992-5052656	19920909 <--
	US 5792840	A	19980811	US 1994-280298	19940726 <--
	KR 183315	B1	19990401	KR 1998-37538	19980911 <--
PRAI	JP 1988-329964	A1	19881227 <--		
	JP 1989-321153	A	19891211 <--		
	JP 1990-37339	A	19900220 <--		
	US 1990-539605	B1	19900618 <--		
	KR 1990-9570	A	19900627 <--		

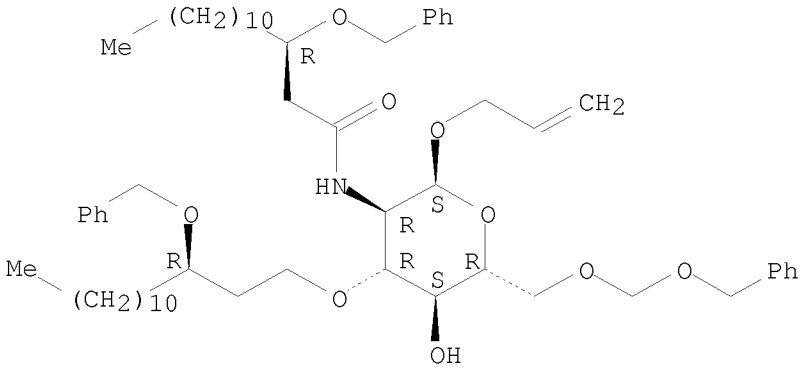
OS MARPAT 116:59901

IT 132791-95-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for antitumor and immunostimulant lipid A analog)

RN 132791-95-8 HCAPLUS

CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-3-O-[3-(phenylmethoxy)tetradecyl]-, [2(R),3(R)]-(9CI) (CA INDEX NAME)

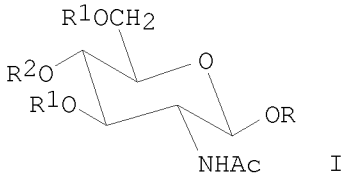
Absolute stereochemistry.



L18 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN

TI 4-Pivaloylaminobenzyl ether, a new temporary protection for hydroxyl functions

GI



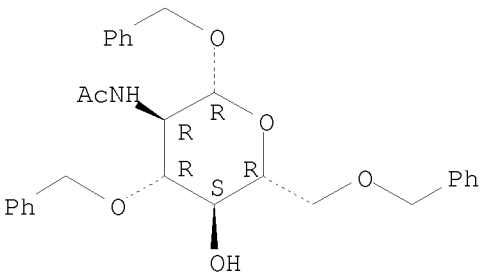
I

AB 4-Pivaloylaminobenzyl (PAB) group is a new benzyl-type protecting group which can be introduced either by initial introduction of 4-nitrobenzyl group followed by reduction and N-acylation or by the reaction of a hydroxyl

compound, e.g. I (R = R1 = CH2Ph, R2 = H; R = CH2CH:CH2, R1 = H, R2 = CH2Ph), with the corresponding halogenide or trichloroacetimide. PAB ethers have higher acid stability than 4-methoxybenzyl ethers but are readily cleaved with DDQ in a manner similar to the latter.

AN 1991:632642 HCAPLUS <<LOGINID::20091002>>
DN 115:232642
OREF 115:39673a,39676a
TI 4-Pivaloylaminobenzyl ether, a new temporary protection for hydroxyl functions
AU Fukase, Koichi; Yoshimura, Takuya; Hashida, Manabu; Kusumoto, Shoichi
CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan
SO Tetrahedron Letters (1991), 32(32), 4019-22
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
OS CASREACT 115:232642
IT 62867-63-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(pivaloylaminobenzylation of)
RN 62867-63-4 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

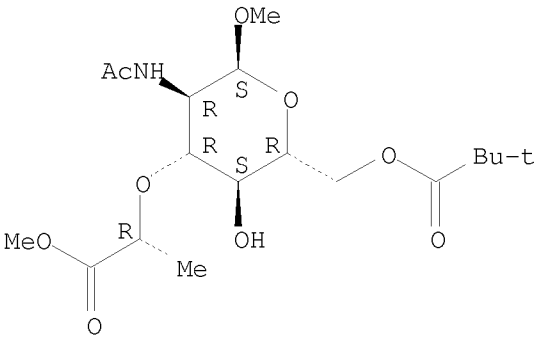


OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L18 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Selective pivaloylation of 2-(acetamido)-2-deoxy sugars [Erratum to document cited in CA110(23):213238k]
AB Errors in the names for compds. 8, 19, and 20 have been corrected The errors were reflected in the index entries.
AN 1989:614852 HCAPLUS <<LOGINID::20091002>>
DN 111:214852
OREF 111:35649a,35652a
TI Selective pivaloylation of 2-(acetamido)-2-deoxy sugars [Erratum to document cited in CA110(23):213238k]
AU Ljevakovic, Durdica; Tomic, Srdanka; Tomasic, Jelka
CS Dep. Radioimmunol., Inst. Immunol., Zagreb, 41000, Yugoslavia
SO Carbohydrate Research (1989), 191(1), C1
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
IT 120489-47-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of (Erratum))
RN 120489-47-6 HCAPLUS

CN α-Muramic acid, N-acetyl-1-O-methyl-, methyl ester, 6-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

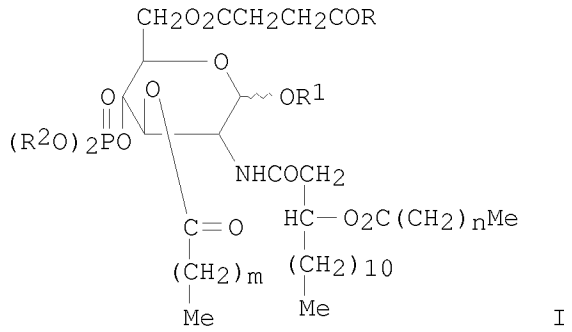
Absolute stereochemistry.



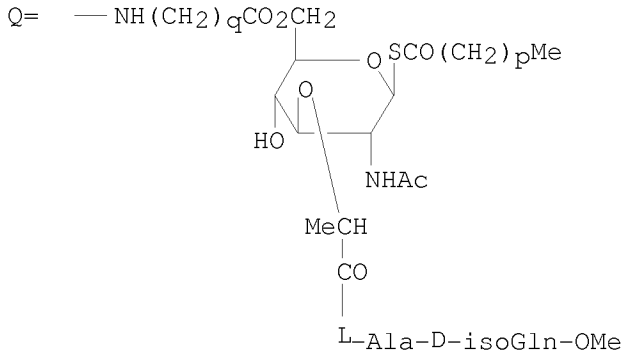
L18 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Preparation of physiologically active lipid A analogs linked to S-containing peptidoglycan analogs.

GI



I



AB The title compds. (I; R = Q; R1 = R2 = H; m, n = 8-12; p = 0-22; q = 1-15) (II) having physiol. activities (no data) were prepared Esterification of 2-(trimethylsilyl)ethyl 4-O-[bis(2,2,2-trichloroethyl)phosphono-2-deoxy-3-

O-tetradecanoyl-2-[(3R)-3-tetradecanoyloxytetradecanamido]-β-D-glucopyranoside (III) (preparation given) with succinic anhydride in CH2Cl2 containing 4-dimethylaminopyridine (DMAP) gave I (R = OH, OR1 = β-Me3SiCH2CH2, R2 = CCl3CH2, m = n = 12) which was treated with DCC in 1,4-dioxane containing concentrated H2SO4 followed by N-acetylmuramic acid derivative QH (p = 0, q = 10) (IV) (preparation given) to give I (R = Q; OR1, R2, m, n, p, q = same as above). Stepwise deprotection of the latter by treatment with BF3·OEt2 in CH2Cl2 to remove Me3SiCH2CH2 group followed by treatment with Zn dust in AcOH to remove the CCl3CH2 group gave I (R = Q, R1 = R2 = H, m = n = 12, p = 0, q = 10).

AN 1989:534690 HCAPLUS <<LOGINID::20091002>>
DN 111:134690
OREF 111:22563a,22566a
TI Preparation of physiologically active lipid A analogs linked to S-containing peptidoglycan analogs.
IN Hasegawa, Akira; Kiso, Makoto; Morihara, Kazuyuki
PA Toho Pharmaceutical Industries Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63307896	A	19881215	JP 1987-144457	19870609 <--
PRAI JP 1987-144457		19870609 <--		

OS MARPAT 111:134690
IT 122565-71-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and amidation of, with (carboxypropanoyl)glucosamine derivative)
RN 122565-71-3 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-1-S-acetyl-6-O-(11-amino-1-oxoundecyl)-1-thio-β-muramoyl]-L-alanyl]-, methyl ester, mono(trichloroacetate) (9CI) (CA INDEX NAME)

L18 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation of physiologically active congugates of lipid A nonreducing monosaccharide subunit analogs with 1-thiomuramyl dipeptide derivatives
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

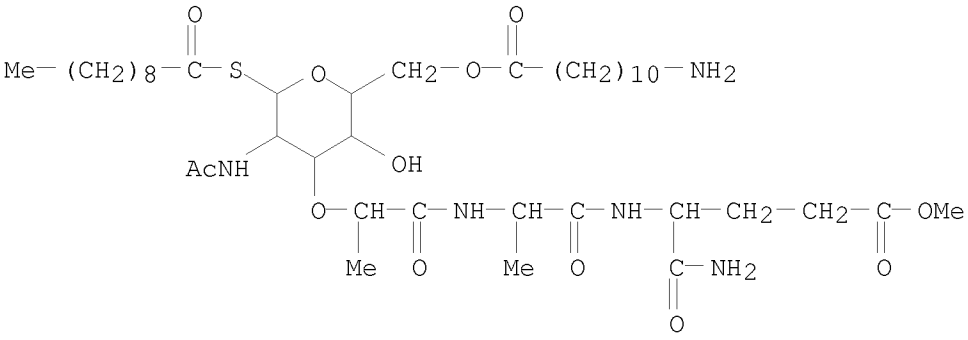
AB The title conjugates [I; X = Q, R = R1 = H; l = 8-12; m = 0-22; n = 1-15; provided that the asym. C's at the 3-position of 2- or 3-substituents in the pyranose ring may have S- or R-configuration], having physiol. activity (no data), were prepared Treatment of I (X = OH, OR = β-OCH2CH2SiMe3, R1 = Cl3CCH2; l = 12) (II) (preparation given) with DCC and concentrated H2SO4 in 1,4-dioxane and reaction of the active intermediate with 1-thiomuramyl dipeptide derivative QH·CF3CO2H (m = 0, n = 10) in MeOH/1,4-dioxane containing Et3N gave 42.2% I (X = Q, OR = β-OCH2CH2SiMe3, R1 = CCl3CH2, l = 12, m = 0, n = 10). Deprotection of the latter by treatment with BF3·OEt2 in Cl2H2 to remove

Me3SiCH2CH2, followed by Zn powder to remove Cl3CCH2 in AcOH, gave I (X = Q, R = R1 = H, l = 12, m = 0, n = 10).

AN 1989:515701 HCAPLUS <<LOGINID::20091002>>
DN 111:115701
OREF 111:19407a,19410a
TI Preparation of physiologically active congugates of lipid A nonreducing monosaccharide subunit analogs with 1-thiomuramyl dipeptide derivatives
IN Hasegawa, Akira; Kiso, Makoto; Morihara, Kazuyuki
PA Toho Pharmaceutical Industries Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01019098	A	19890123	JP 1987-175766	19870714 <--
PRAI JP 1987-175766		19870714 <--		

OS MARPAT 111:115701
IT 122099-28-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation of, with (carboxypropanoyl)glucosamine derivative)
RN 122099-28-9 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-(11-amino-1-oxoundecyl)-1-S-(1-oxodecyl)-1-thio-β-muramoyl]-L-alanyl]-, methyl ester (9CI) (CA INDEX NAME)



L18 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation of lipid A nonreducing monosaccharide analogs linked to peptidoglycan thio analogs having physiological activity
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. (I; R = R1 = H; X = Q; m, n = 8-12; p = 0-22; q = 1-15) (II) having physiol. activities (no data), were prepared Selective S-deacetylation of N-[[2-O-(2-acetamido-1-S-acetyl-2,3-dideoxy-4,6-isopropylidene-1-thio-β-D-glucopyranosyl-3-yl)-D-lactoyl]]-L-alanyl-D-isoglutamine Me ester with NaOMe in MeOH at -20° followed by thioesterification with 11-(tert-butoxycarbonylamino)undecanoic acid in

1,4-dioxane containing DCC, deacetonation with 80% aqueous HOAc at 45°, and esterification with decanoic acid in dioxane containing DCC and a trace of 4-dimethylaminopyridine gave QCO2CMe3 (p = 8, q = 10). Deprotection of the latter with CF3CO2H at 0° and amidation of the resulting QH·CF3CO2H (p = 8, q = 10) with activated β-I (R = CCl3CH2, R1 = CH2CH2SiMe3, X = OH, m = n = 12) (prepared in the previous patent) in DMF containing 1 drop or Et3N gave 60.2% I (R = CCl3CH2, R1 = CH2CH2SiMe3, X = Q, m = n = 12, p = 8, q = 10), which was treated with BF3.Et2O to remove the CH2CH2SiMe3 group followed by Zn powder in AcOH at 40° to remove the CCl3CH2 group to give quant. I (R = R1 = H, X = Q, m = n = 12, p = 8, q = 10).

AN 1989:478546 HCAPLUS <<LOGINID::20091002>>
DN 111:78546
OREF 111:13247a,13250a
TI Preparation of lipid A nonreducing monosaccharide analogs linked to peptidoglycan thio analogs having physiological activity
IN Hasegawa, Akira; Kiso, Makoto; Morihara, Kazuyuki
PA Toho Pharmaceutical Industries Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

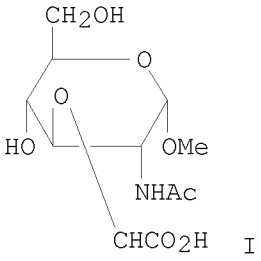
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63307897	A	19881215	JP 1987-144458	19870609 <--
PRAI JP 1987-144458		19870609 <--		

OS MARPAT 111:78546
IT 121885-17-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and amidation of, with (carboxypropanoyl)glucosamine derivative)
RN 121885-17-4 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-1-S-(11-amino-1-oxoundecyl)-6-O-(1-oxodecyl)-1-thio-β-muramoyl]-L-alanyl]-, methyl ester, mono(trichloroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 121885-16-3
CMF C41 H73 N5 O12 S

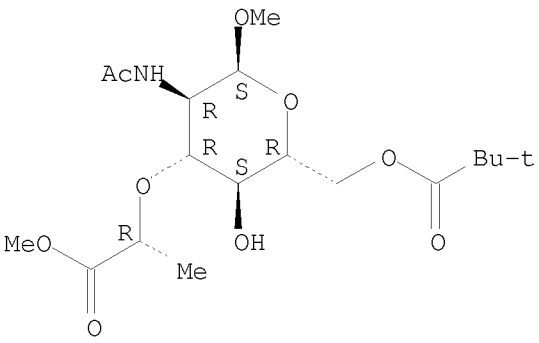
L18 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Selective pivaloylation of 2-(acetamido)-2-deoxy sugars
GI



I

AB Selective pivaloylation of 2-acetamido-2-deoxy-D-glucose, its Me α- and β-glycosides, and the Me α-glycoside of N-acetyl-D-muramic acid I was studied under various conditions. The structures of the products were established by 1H-NMR spectroscopy and acetylation. The orders of acylation, HO-6 > HO-3 > HO-1 > HO-4 for 2-acetamido-2-deoxy-D-glucose and HO-6 > HO-3 > HO-4 for its Me glycosides, were established. Me 2-acetamido-2-deoxy-3,6-di-O-pivaloyl-α- and β-D-glucopyranosides and 2-acetamido-2-deoxy-1,3,4,6-tetra-O-pivaloyl-D-glucopyranose were hydrolyzed by rabbit serum esterases.
AN 1989:213238 HCAPLUS <<LOGINID::20091002>>
DN 110:213238
OREF 110:35402h,35403a
TI Selective pivaloylation of 2-(acetamido)-2-deoxy sugars
AU Ljevakovic, Durdica; Tomic, Srdanka; Tomasic, Jelka
CS Dep. Radioimmunol., Inst. Immunol., Zagreb, 41000, Yugoslavia
SO Carbohydrate Research (1988), 182(2), 197-205
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
OS CASREACT 110:213238
IT 120489-47-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)
RN 120489-47-6 HCAPLUS
CN α-Muramic acid, N-acetyl-1-O-methyl-, methyl ester, 6-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

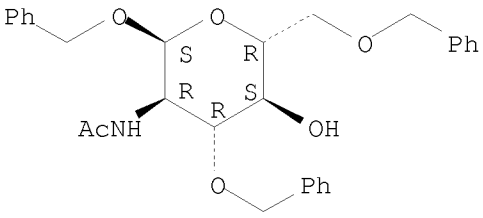
Absolute stereochemistry.



OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

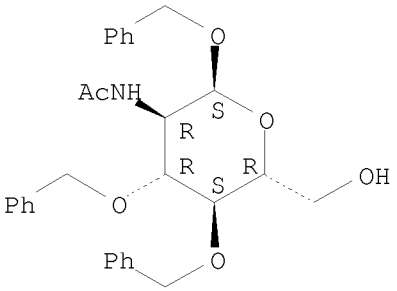
L18 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Approaches to selective benzylation of a primary hydroxy group
GI For diagram(s), see printed CA Issue.
AB Benzylation of benzyl 2-acetamido-3-O-benzyl-2-deoxy-α-D-glucopyranoside (I), by PhCH2Cl in DMF containing NaOCHMe2 gave 5%, 3,4,6-tri-O-benzyl-, 15% 3,4-di-O-benzyl-, 50% 3,6-di-O-benzyl- derivs., and 30% unreacted I. Benzylation of lactoside II (R = R1 = H) by PhCH2OC(:NH)CCl3 in CH2Cl2 containing CF3SO3H gave a mixture containing II (R = PhCH2, R1 = H; R = H, R1 = PhCH2) (2:1) in 45-60% yields. Benzylation of benzyl 2-acetamido-2-deoxy-α-D-glucopyranoside by PhCH2Br in DMF containing TlOEt gave 80-90% benzyl 2-acetamido-6-O-benzyl-2-deoxy-α-D-glucopyranoside.
AN 1987:18954 HCAPLUS <<LOGINID::20091002>>
DN 106:18954
OREF 106:3261a,3264a
TI Approaches to selective benzylation of a primary hydroxy group
AU Bovin, N. V.; Musina, L. Yu.; Khorlin, A. Ya.
CS Inst. Bioorg. Khim. im. Shemyakina, Moscow, USSR
SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1986), (3), 671-75
CODEN: IASKA6; ISSN: 0002-3353
DT Journal
LA Russian
OS CASREACT 106:18954
IT 55287-49-5P 55287-54-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55287-49-5 HCAPLUS
CN α-D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



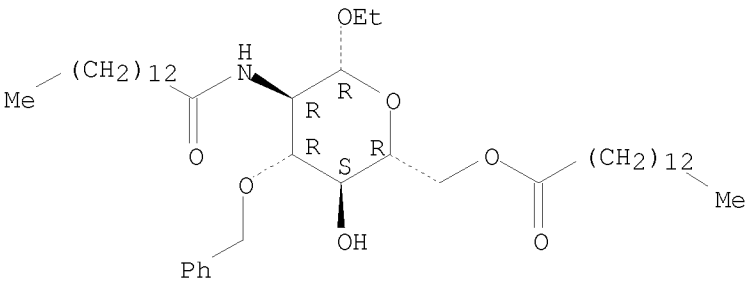
RN 55287-54-2 HCAPLUS
CN α-D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3,4-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L18 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis of diglycosyl phosphate via a phosphite intermediate: partial structure of lipid A
AB An approach to the synthesis of diglycosyl phosphates via the intermediacy of diglycosyl phosphites, and its application to the synthesis of a part structure of the lipid A of Salmonella lipopolysaccharide is described.
AN 1985:167063 HCAPLUS <<LOGINID::20091002>>
DN 102:167063
OREF 102:26281a,26284a
TI Synthesis of diglycosyl phosphate via a phosphite intermediate: partial structure of lipid A
AU Ogawa, Tomoya; Seta, Akinori
CS Inst. Phys. Chem. Res., Saitama, 351, Japan
SO Bact. Endotoxin (1984), 51-7. Editor(s): Homma, J. Yuzuru. Publisher: Verlag Chemie, Weinheim, Fed. Rep. Ger.
CODEN: 53BHAA
DT Conference
LA English
IT 96016-81-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, synthesis of partial structure of lipid A in relation to)
RN 96016-81-8 HCAPLUS
CN β-D-Glucopyranoside, ethyl 2-deoxy-2-[(1-oxotetradecyl)amino]-3-O-(phenylmethyl)-, 6-tetradecanoate (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Organic oligosaccharides, corresponding to fragments of natural mucopolysaccharides, and their biological applications
GI For diagram(s), see printed CA Issue.
AB Mucopolysaccharide fragments were synthesized. Thus the pentasaccharide I was prepd from the monosaccharides in a synthesis comprising many steps. I has factor Xa antigonist activity >2000 U/mg.
AN 1984:7066 HCAPLUS <<LOGINID::20091002>>
DN 100:7066
OREF 100:1235a,1238a
TI Organic oligosaccharides, corresponding to fragments of natural mucopolysaccharides, and their biological applications
IN Petitou, Maurice; Jacquinet, Jean Claude; Sinay, Pierre; Choay, Jean; Lormeau, Jean Claude; Nassr, Mahmoud
PA Choay S. A., Fr.
SO Eur. Pat. Appl., 187 pp.
CODEN: EPXXDW
DT Patent

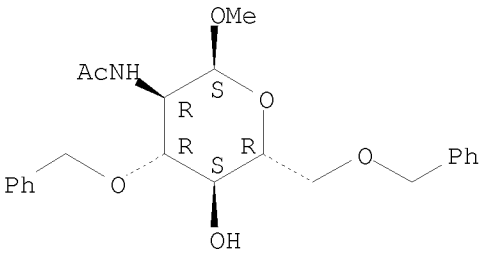
LA French
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 84999	A1	19830803	EP 1983-400110	19830117	<--
	EP 84999	B1	19880413			
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
	FR 2519987	A1	19830722	FR 1982-621	19820115	<--
	FR 2520744	A1	19830805	FR 1982-1575	19820201	<--
	FR 2521566	A1	19830819	FR 1982-2526	19820216	<--
	FR 2527614	A1	19831202	FR 1982-9392	19820528	<--
	FR 2528853	A1	19831223	FR 1982-10891	19820622	<--
	FR 2528854	A1	19831223	FR 1982-10892	19820622	<--
	FR 2529557	A1	19840106	FR 1982-11679	19820702	<--
	FR 2531436	A1	19840210	FR 1982-13804	19820806	<--
	FR 2533219	A1	19840323	FR 1982-15803	19820920	<--
	FR 2533220	A1	19840323	FR 1982-15804	19820920	<--
	FR 2535324	A1	19840504	FR 1982-18003	19821027	<--
	US 4987223	A	19910122	US 1982-453731	19821027	<--
	CA 1265132	A1	19900130	CA 1983-419417	19830113	<--
	DK 8300143	A	19830716	DK 1983-143	19830114	<--
	DK 174348	B1	20021223			
	AU 8310397	A	19830721	AU 1983-10397	19830114	<--
	AU 563351	B2	19870709			
	JP 58170797	A	19831007	JP 1983-5178	19830114	<--
	JP 05065517	B	19930917			
	SU 1694065	A3	19911123	SU 1983-3545151	19830114	<--
	AT 33496	T	19880415	AT 1983-400110	19830117	<--
	AU 8321285	A	19840522	AU 1983-21285	19831027	<--
	AU 581167	B2	19890216			
	JP 59501906	T	19841115	JP 1983-503432	19831027	<--
	JP 05066392	B	19930921			
	AT 40555	T	19890215	AT 1983-402109	19831027	<--
	DK 8403135	A	19840627	DK 1984-3135	19840627	<--
	DK 175970	B1	20051003			
	US 4943630	A	19900724	US 1986-856855	19860421	<--
	JP 05331182	A	19931214	JP 1992-115407	19920408	<--
	JP 2510454	B2	19960626			
PRAI	FR 1982-621	A	19820115	<--		
	FR 1982-1575	A	19820201	<--		
	FR 1982-2526	A	19820216	<--		
	FR 1982-9392	A	19820528	<--		
	FR 1982-10891	A	19820622	<--		
	FR 1982-10892	A	19820622	<--		
	FR 1982-11679	A	19820702	<--		
	FR 1982-13804	A	19820806	<--		
	FR 1982-15803	A	19820920	<--		
	FR 1982-15804	A	19820920	<--		
	FR 1982-18003	A	19821027	<--		
	FR 1981-24132	A	19811223	<--		
	FR 1982-18001	A	19821027	<--		
	EP 1983-400110	A	19830117	<--		
	EP 1983-402109	A	19831027	<--		
	WO 1983-FR217	A	19831027	<--		
	US 1984-624628	A	19840626	<--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS CASREACT 100:7066
IT 85193-92-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with bromomonosaccharide derivs.)

RN 85193-92-6 HCAPLUS
CN α-D-Glucopyranoside, methyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

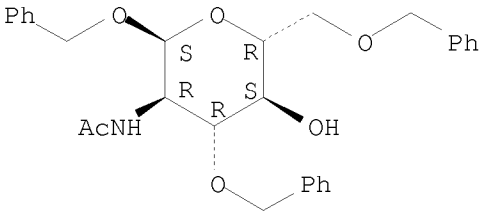
Absolute stereochemistry.



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

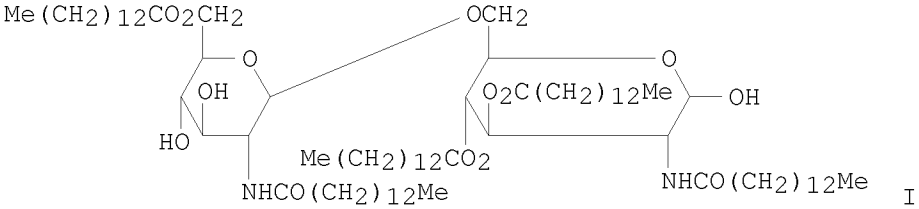
L18 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis of blood-group substances. Part 11. Synthesis of the trisaccharide O-α-D-galactopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→4)-2-acetamido-2-deoxy-D-glucopyranose
GI For diagram(s), see printed CA Issue.
AB The title trisaccharide I (R = H) was prepared from the monosaccharide II in 8 steps. The key step was the regiospecific reaction of the acetimidate III with the disaccharide IV (anhydrous MeNO2, p-MeC6H4SO3H catalyst, under N, room temperature, 21 h) to give 71% I (R = CH2Ph) which underwent catalytic hydrogenolysis (Pd/C) to give 96% I (R = H).
AN 1981:175395 HCAPLUS <<LOGINID::20091002>>
DN 94:175395
OREF 94:28678h,28679a
TI Synthesis of blood-group substances. Part 11. Synthesis of the trisaccharide O-α-D-galactopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→4)-2-acetamido-2-deoxy-D-glucopyranose
AU Jacquinet, Jean Claude; Duchet, Danielle; Milat, Marie Louise; Sinay, Pierre
CS Lab. Biochim. Struct., Unites Enseign. Rech. Sci. Fondam. Appl., Orleans, 45046, Fr.
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1981), (1), 326-30
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
IT 55287-49-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling reaction of, with saccharide)
RN 55287-49-5 HCAPLUS
CN α-D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

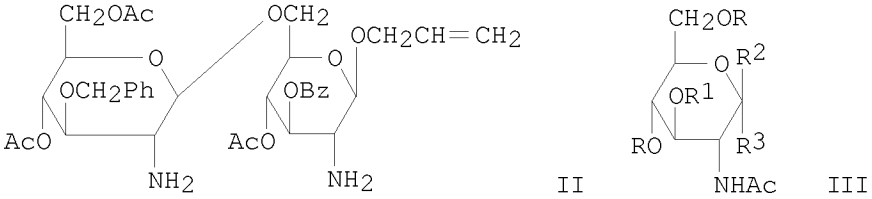


OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

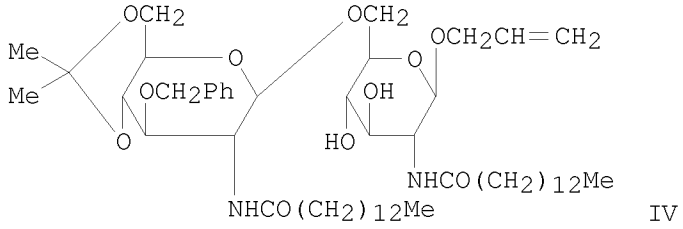
L18 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis of liposaccharide corresponding to fundamental structure of Salmonella-type lipid A
GI



I



II III

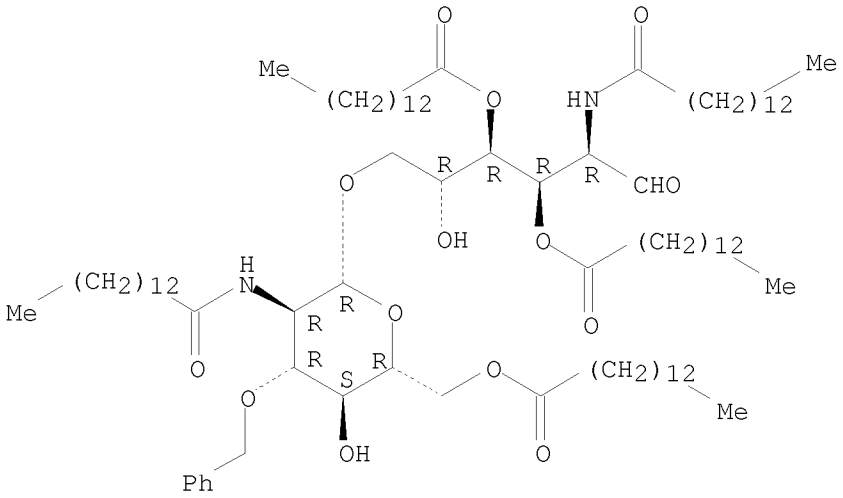


IV

AB The glucopyranose I, which is the fundamental structure of lipid A without the phosphate moiety, was prepared by stepwise introduction of the acyl groups into the disaccharide II. Thus, II prepared by sequential coupling of monosaccharides III (R = Ac, R1 = CH2Ph, R2 = H, R3 = Cl; R = R3 = H, R1 = Bz, R2 = OCH2CH:CH2), acetylation, and N-deacetylation, was treated with Me(CH2)12COCl to give an N,N-dimyristoyl disaccharide, which was saponified to remove the O-acyl groups. Reaction of the product with Me2C(OMe)2 gave semiprotected product IV. The OH groups of IV were acylated with Me(CH2)12COCl and the product hydrolyzed, and selectively reacylated, followed by hydrogenolytic cleavage of the CH2Ph group to give 97% I.

AN 1981:175390 HCAPLUS <<LOGINID::20091002>>
DN 94:175390
OREF 94:28675a,28678a
TI Synthesis of liposaccharide corresponding to fundamental structure of Salmonella-type lipid A
AU Inage, Masaru; Chaki, Haruyuki; Kusumoto, Shoichi; Shiba, Tetsuo
CS Dep. Chem., Osaka Univ., Osaka, 560, Japan
SO Tetrahedron Letters (1980), 21(40), 3889-92
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
IT 76994-70-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of)
RN 76994-70-2 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-6-O-(1-oxotetradecyl)-2-[(1-oxotetradecyl)amino]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[(1-oxotetradecyl)amino]-, 3,4-ditetradecanoate (CA INDEX NAME)

Absolute stereochemistry.



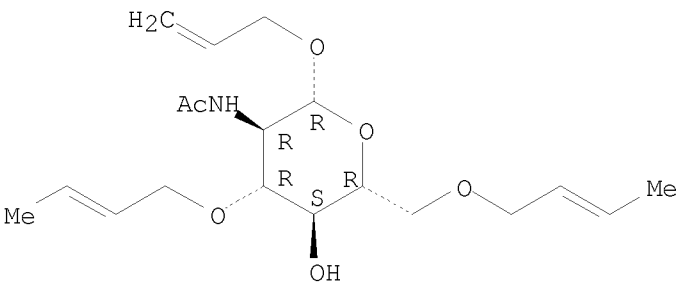
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L18 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
TI The synthesis of O-β-D-mannopyranosyl-(1 → 4)-O-(2-acetamido-2-deoxyy-β-D-glucopyranosyl)-(1 → 4)-2-acetamido-2-deoxy-D-glucopyranose. Part II
AB Allyl 2-acetamido-3,6-di-O-(2-butenyl)-2-deoxy-β-D-glucopyranoside was prepared, and coupled with 2-methyl-(4-O-acetyl-3,6-di-O-benzyl-1,2-dideoxy-α-D-glucopyrano)-[2,1-d]-2-oxazoline. The resulting, protected disaccharide allyl 2-acetamido-4-O-(2-acetamido-4-O-acetyl-3,6-di-O-benzyl-2-deoxy-β-D-glucopyranosyl)-3,6-di-O-(2-butenyl)-2-deoxy-β-glucopyranoside was O-deacetylated and the product coupled with 2-O-acetyl-3,4,6-tri-O-benzyl-α-D-glucopyranosyl bromide in the presence of Ag trifluoromethanesulfonate and 1,1,3,3-tetramethylurea, to give the trisaccharide, allyl O-(2-O-acetyl-3,4,6-tri-O-benzyl-β-D-glucopyranosyl)-(1→4)-O-(2-acetamido-3,6-di-O-benzyl-2-deoxy-β-D-glucopyranosyl)-(1→4)-2-acetamido-3,6-di-O-(2-butenyl)-2-deoxy-β-D-glucopyranoside. O-Deacetylation, oxidation with Ac2O-Me2SO and stereoselective reduction with NaBH4 gave mainly allyl

O-(3,4,6-tri-O-benzyl-D-mannopyranosyl)-(1→4)-O-(2-acetamido-3,6-di-O-benzyl-2-deoxy-β-D-glucopyranosyl)-(1→4)-2-acetamido-3,6-di-O-(2-butenyl)-2-deoxy-β-glucopyranoside. Removal of the 2-butenyl groups was performed by treatment with Me3COK in Me2SO, followed by isomerization of the allyl to a 1-propenyl group with tris(triphenylphosphine)rhodium chloride. Mild, acid treatment, and hydrogenation, gave the title trisaccharide.

AN 1980:514884 HCAPLUS <<LOGINID::20091002>>
DN 93:114884
OREF 93:18413a,18416a
TI The synthesis of O-β-D-mannopyranosyl-(1 → 4)-O-(2-acetamido-2-deoxyy-β-D-glucopyranosyl)-(1 → 4)-2-acetamido-2-deoxy-D-glucopyranose. Part II
AU Auge, Claudine; Warren, Christopher D.; Jeanloz, Roger W.; Kiso, Makoto; Anderson, Laurens
CS Dep. Biol. Chem., Harvard Med. Sch., Boston, MA, 02114, USA
SO Carbohydrate Research (1980), 82(1), 85-95
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
IT 74653-19-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and coupling reaction of, with monosaccharide oxazoline derivative)
RN 74653-19-3 HCAPLUS
CN β-D-Glucopyranoside, 2-propen-1-yl 2-(acetylamino)-3,6-di-O-2-buten-1-yl-2-deoxy- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 14:24:40 ON 02 OCT 2009)

FILE 'REGISTRY' ENTERED AT 14:24:56 ON 02 OCT 2009
L1 STRUCTURE UPLOADED
L2 50 S L1
L3 3215 S L1 SSS FULL
L4 STRUCTURE UPLOADED
L5 48 S L4
L6 939 S L4 SUB=L3 FULL
L7 2276 S L3 NOT L6

```
L8         2276 S L7

     FILE 'HCAPLUS' ENTERED AT 14:26:34 ON 02 OCT 2009
L9          831 S L7
L10         717 S L9 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'STNGUIDE' ENTERED AT 14:27:11 ON 02 OCT 2009

     FILE 'REGISTRY' ENTERED AT 14:28:06 ON 02 OCT 2009
L11             STRUCTURE UPLOADED
L12          45 S L11
L13         970 S L11  SUB=L3 FULL
L14        1306 S L7 NOT L13

     FILE 'HCAPLUS' ENTERED AT 14:28:53 ON 02 OCT 2009
L15         446 S L14
L16         389 S L15 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'STNGUIDE' ENTERED AT 14:29:19 ON 02 OCT 2009

     FILE 'HCAPLUS' ENTERED AT 14:30:10 ON 02 OCT 2009
L17       13344 S MONOSACCHARIDE
L18          18 S L16 AND L17

=> log hold

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     104.37     385.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -14.76     -14.76

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:30:51 ON 02 OCT 2009

Connecting via Winsock to STN



Welcome to STN International!  Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 15:06:51 ON 02 OCT 2009
FILE 'HCAPLUS' ENTERED AT 15:06:51 ON 02 OCT 2009
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     104.37     385.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -14.76     -14.76

=> file registry
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	107.22	388.67

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-14.76	-14.76

FILE 'REGISTRY' ENTERED AT 15:07:09 ON 02 OCT 2009

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 1 OCT 2009 HIGHEST RN 1187162-65-7
DICTIONARY FILE UPDATES: 1 OCT 2009 HIGHEST RN 1187162-65-7

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
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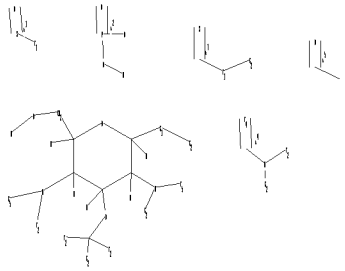

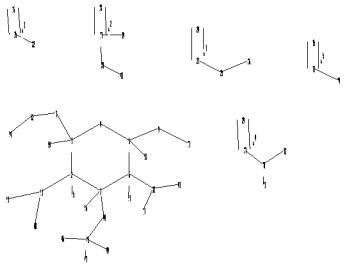

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ring nodes :
1 2 3 4 5 6
chain bonds :
1-44 1-56 2-51 2-55 3-7 3-59 5-9 5-58 6-12 6-57 7-52 9-11 12-13 12-43
15-16 15-22 17-18 17-19 17-20 20-41 23-24 23-25 25-26 27-29 27-30 30-31
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33-35 44-45 45-46 45-47 45-49 51-53 51-60 52-54
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 1-44 2-3 2-51 3-4 4-5 5-6 5-9 6-12 9-11 12-13 12-43 15-16
15-22
17-19 23-24 23-25 25-26 27-29 27-30 30-31 30-32 33-35 44-45 45-46 45-47
45-49 51-53
51-60
exact bonds :
1-56 2-55 3-7 3-59 5-58 6-57 7-52 20-41 33-34 52-54
normalized bonds :
17-18 17-20

G1:O,S

G2:C,H

G3:C,H,N

G4:O,S,NH

G5:[*1],[*2],[*3],[*4],[*5]

G6:O,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 11:CLASS 12:CLASS
13:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS
23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS
34:CLASS 35:CLASS
41:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS 47:CLASS 49:CLASS 51:CLASS
52:CLASS 53:CLASS
54:CLASS 55:CLASS 56:CLASS 57:CLASS 58:CLASS 59:CLASS 60:CLASS

L19   STRUCTURE UPLOADED

=> s l19
SAMPLE SEARCH INITIATED 15:07:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   1 TO ITERATE

100.0% PROCESSED   1 ITERATIONS   0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 1 TO   80
PROJECTED ANSWERS: 0 TO   0

L20   0 SEA SSS SAM L19

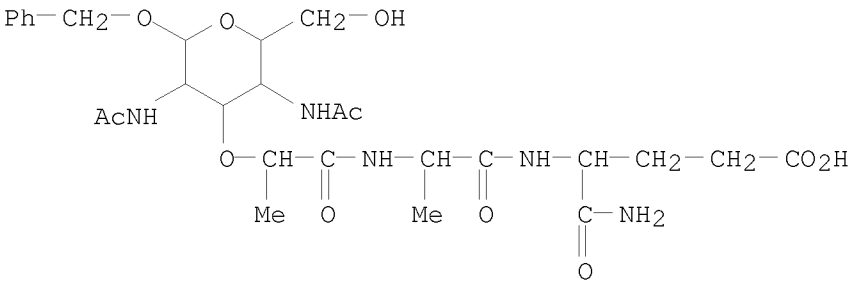
=> s l19 sub=l14
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 15:08:18 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -   3 TO ITERATE

100.0% PROCESSED   3 ITERATIONS   3 ANSWERS
SEARCH TIME: 00.00.01

L21   3 SEA SUB=L14 SSS FUL L19

=> d l21 scan

L21 3 ANSWERS   REGISTRY COPYRIGHT 2009 ACS on STN
IN   D-α-Glutamine, N2-[N-[N-acetyl-4-(acetylamino)-4-deoxy-1-O-
     (phenylmethyl)-α-muramoyl]-L-alanyl]- (9CI)
MF   C28 H41 N5 O11

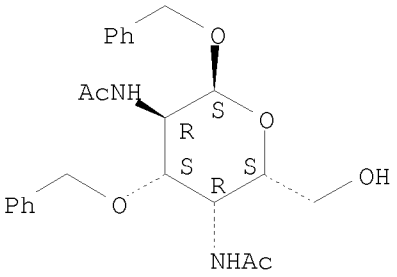


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L21 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN α-D-Galactopyranoside, phenylmethyl
2,4-bis(acetylamino)-2,4-dideoxy-3-O-(phenylmethyl)-
MF C24 H30 N2 O6

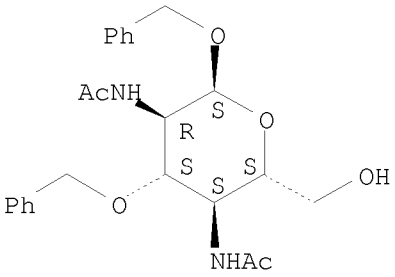
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L21 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN α-D-Glucopyranoside, phenylmethyl
2,4-bis(acetylamino)-2,4-dideoxy-3-O-(phenylmethyl)-
MF C24 H30 N2 O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> 0
0 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	45.44	434.11

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-14.76

FILE 'HCAPLUS' ENTERED AT 15:08:39 ON 02 OCT 2009
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FILE COVERS 1907 - 2 Oct 2009 VOL 151 ISS 15
FILE LAST UPDATED: 1 Oct 2009 (20091001/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

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reclassification data for the third quarter of 2009.

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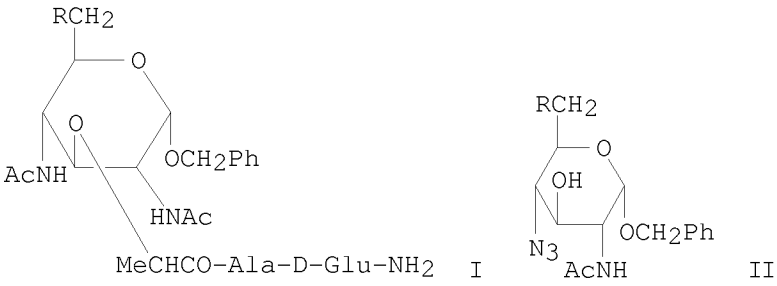
=> s l21
L22 2 L21

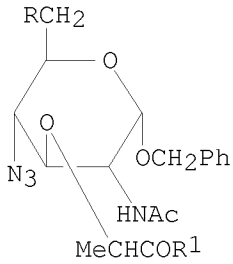
=> d l22 1-2 ti abs bib hitstr

L22 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Studies on immunoadjuvant active compounds. Part XIX. Synthesis of 4-acetamido-N-acetyl-4-deoxy- and 4,6-di(acetamido)-N-acetyl-4,6-dideoxymuramoyl-L-alanyl-D-isoglutamine derivatives
GI

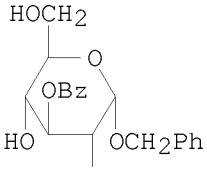


I

II



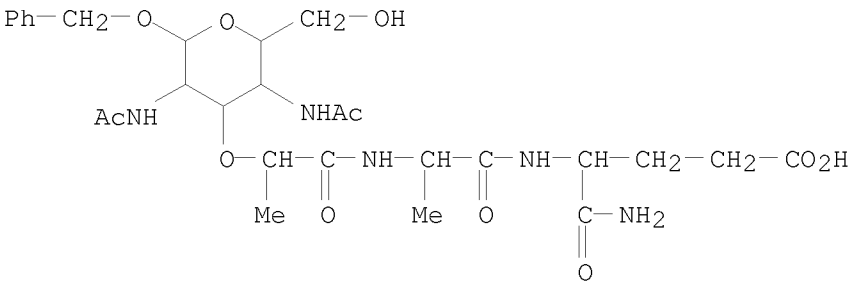
III



IV

AB Title glycopeptides I (R = HO, AcNH) were prepared by treating glucopyranosides II (R = Ph3CO and N3, resp.) with L-MeCHClCO2H in dioxane containing NaH, condensing the resulting muramic acids III (R = HO, N3; R1 = OH) with H-Ala-D-Glu(OCH2Ph)-NH2 by DCC/N-hydroxysuccinimide, and hydrogenating and acetylating the resulting III [R = HO, N3; R1 = Ala-D-Glu(OCH2Ph)-NH2]. I were prepared from glucopyranoside IV in several steps.
AN 1982:510373 HCAPLUS <<LOGINID::20091002>>
DN 97:110373
OREF 97:18377a,18380a
TI Studies on immunoadjuvant active compounds. Part XIX. Synthesis of 4-acetamido-N-acetyl-4-deoxy- and 4,6-di(acetamido)-N-acetyl-4,6-

dideoxymuramoyl-L-alanyl-D-isoglutamine derivatives
AU Hasegawa, Akira; Tanahashi, Eiji; Goh, Yasuhiko; Kiso, Makoto
CS Dep. Agric. Chem., Gifu Univ., Gifu, 504, Japan
SO Carbohydrate Research (1982), 103(2), 273-80
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
IT 82827-90-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82827-90-5 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-4-(acetylamino)-4-deoxy-1-O-(phenylmethyl)-α-muramoyl]-L-alanyl]- (9CI) (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Di- and polyamino sugars. XVIII. 2,4-Diamino-2,4-dideoxy-D-galactose and -D-glucose
GI For diagram(s), see printed CA Issue.
AB 2,4-Diamino-2,4-dideoxy-D-galactose was prepared in a 7-step reaction from 2-amino-2-deoxy-D-glucose (I) via II (R = R1 = Ac, R2 = SO2Me, R3 = OSO2Me), III (R = R1 = Ac, R2 = Bz, R3 = N3) and II (R-R2 = H, R3 = NH2). 2,4-Diamino-2,4-dideoxy-D-glucose was obtained by two methods, one in 11 steps beginning with II (R = Ac, R1 = H, R2R3 = CHPh), the other in 8 steps from I via III (R = Ac, R1 = R2 = H, R3 = OH), III (R = R1 = Ac, R2 = H, R3 = OH), III (R = R1 = Ac, R2 = CPh3, R3 = OSO2Me), and II (R = Ac, R1 = R2 = H, R3 = N3).
AN 1972:552486 HCAPLUS <<LOGINID::20091002>>
DN 77:152486
OREF 77:25083a,25086a
TI Di- and polyamino sugars. XVIII. 2,4-Diamino-2,4-dideoxy-D-galactose and -D-glucose
AU Meyer zu Reckendorf, Wolfgang; Wassiliadou-Micheli, Niobe
CS Inst. Pharm. Chem., Univ. Muenster, Muenster, Fed. Rep. Ger.
SO Chemische Berichte (1972), 105(9), 2998-3013
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA German
IT 38416-22-7P 38416-30-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 38416-22-7 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl 2,4-bis(acetylamino)-2,4-dideoxy-3-O-(phenylmethyl)- (CA INDEX NAME)

http://www.cas.org/support/stngen/stndoc/properties.html

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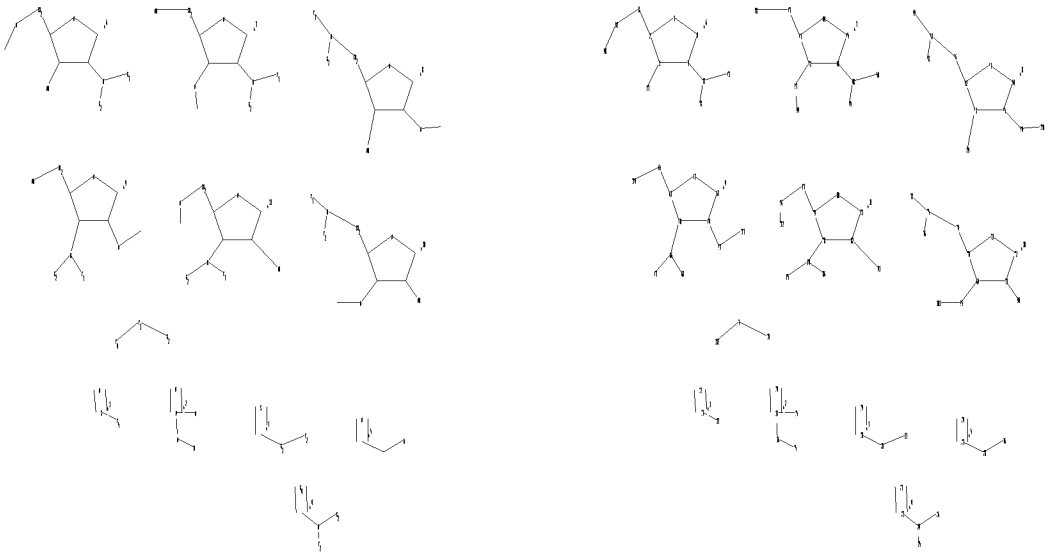
Uploading C:\Program Files\STNEXP\Queries\10524048pentose.str



chain nodes :
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29 35 36 37 38 41 47 48 49 50 56 57 58 59 65 66 67 68 74 75 76
77 83 84 85
86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104
112
ring nodes :
1 2 3 4 5 42 43 44 45 46 51 52 53 54 55 60 61 62 63 64 69 70
71 72 73 78 79 80 81 82
chain bonds :
1-87 2-8 5-37 7-10 7-112 8-92 11-12 11-17 13-14 13-15 13-16 16-35 18-19
18-20 20-21 22-23 22-24 24-25 24-26 27-28 27-29 28-36 37-38 37-41 42-93
43-47 46-48
47-88 48-49 48-50 51-89 52-56 55-94 56-57 57-59 57-58 60-66 61-65 64-97
65-104 66-68
66-67 69-95 70-74 73-90 74-75 75-77 75-76 78-84 79-83 82-91 83-96 84-86
84-85 92-98

93-99 94-100 95-101 96-102 97-103
ring bonds :
1-2 1-5 2-3 3-4 4-5 42-43 42-46 43-44 44-45 45-46 51-52 51-55 52-53
53-54 54-55 60-61 60-64 61-62 62-63 63-64 69-70 69-73 70-71 71-72 72-73
78-79 78-82 79-80
80-81 81-82
exact/norm bonds :
1-2 1-5 1-87 2-3 3-4 4-5 5-37 7-10 7-112 11-12 11-17 13-15 18-19 18-20
20-21 22-23 22-24 24-25 24-26 27-29 28-36 37-38 37-41 42-43 42-46 42-93
43-44 44-45
45-46 46-48 48-49 48-50 51-52 51-55 51-89 52-53 53-54 54-55 55-94 57-59
57-58 60-61
60-64 60-66 61-62 62-63 63-64 64-97 66-68 66-67 69-70 69-73 69-95 70-71
71-72 72-73
73-90 75-77 75-76 78-79 78-82 78-84 79-80 80-81 81-82 82-91 84-86 84-85
92-98 93-99
94-100 95-101 96-102 97-103
exact bonds :
2-8 8-92 16-35 27-28 43-47 47-88 52-56 56-57 61-65 65-104 70-74 74-75
79-83 83-96
normalized bonds :
13-14 13-16

G1:O,S

G2:C,H

G3:[*1],[*2],[*3],[*4],[*5]

G4:[*6],[*7],[*8],[*9],[*10],[*11]

G5:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:CLASS 8:CLASS 10:CLASS 11:CLASS
12:CLASS
13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS
23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 35:CLASS
36:CLASS 37:CLASS
38:CLASS 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:CLASS 48:CLASS
 49:CLASS
50:CLASS 51:Atom 52:Atom 53:Atom 54:Atom 55:Atom 56:CLASS 57:CLASS 58:CLASS
 59:CLASS
60:Atom 61:Atom 62:Atom 63:Atom 64:Atom 65:CLASS 66:CLASS 67:CLASS 68:CLASS
 69:Atom 70:Atom
71:Atom 72:Atom 73:Atom 74:CLASS 75:CLASS 76:CLASS 77:CLASS 78:Atom 79:Atom
 80:Atom
81:Atom 82:Atom 83:CLASS 84:CLASS 85:CLASS 86:CLASS 87:CLASS 88:CLASS
89:CLASS 90:CLASS 91:CLASS
92:CLASS 93:CLASS 94:CLASS 95:CLASS 96:CLASS 97:CLASS 98:CLASS 99:CLASS
100:CLASS
101:CLASS 102:CLASS 103:CLASS 104:CLASS 112:CLASS

L23   STRUCTURE UPLOADED

=> s l23

CIRCULAR VARIABLE DEFINITION NOT ALLOWED
The query structure contains two or more variable groups (Gk) that are directly or indirectly defined by each other. Circular definitions of variable groups are not allowed. The following are examples of circular definitions:

1. Direct circular definition:

```
C--G1     N--G2
1  2      3  4

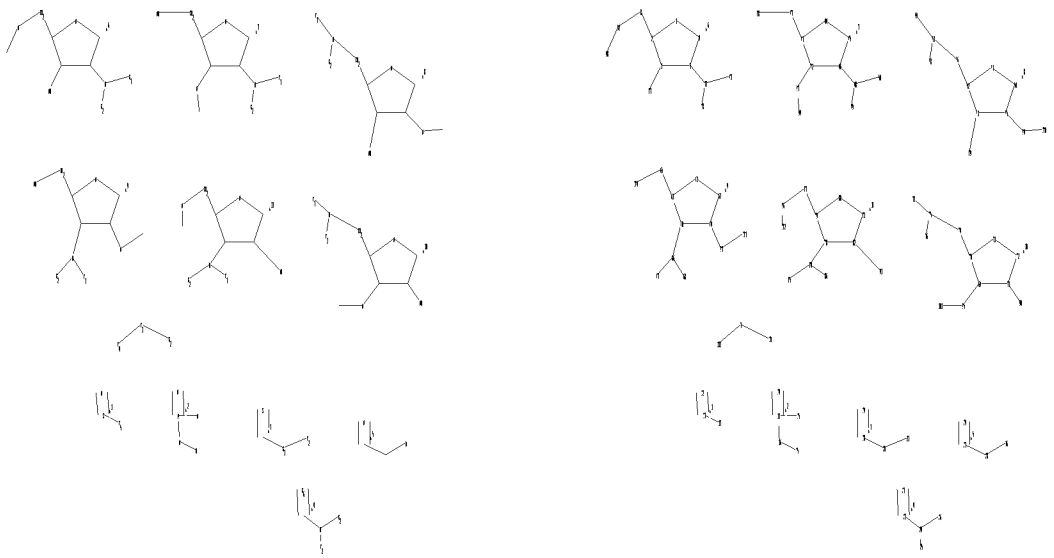
VAR G1 = 3/NO2
VAR G2 = 1/CH3
```

2. Indirect circular definition:

```
C--G1     N--G2     O--G3
1  2      3  4      5  6

VAR G1 = 3/NO2
VAR G2 = 5/CH3
VAR G3 = 1/CH3
```

=>
Uploading C:\Program Files\STNEXP\Queries\10524048pentose2.str



chain nodes :
7 8 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
29 35 36 37 38 41 47 48 49 50 56 57 58 59 65 66 67 68 74 75 76
77 83 84 85
86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104
112
ring nodes :
1 2 3 4 5 42 43 44 45 46 51 52 53 54 55 60 61 62 63 64 69 70
71 72 73 78 79 80 81 82
chain bonds :
1-87 2-8 5-37 7-10 7-112 8-92 11-12 11-17 13-14 13-15 13-16 16-35 18-19
18-20 20-21 22-23 22-24 24-25 24-26 27-28 27-29 28-36 37-38 37-41 42-93
43-47 46-48
47-88 48-49 48-50 51-89 52-56 55-94 56-57 57-59 57-58 60-66 61-65 64-97
65-104 66-68
66-67 69-95 70-74 73-90 74-75 75-77 75-76 78-84 79-83 82-91 83-96 84-86
84-85 92-98
93-99 94-100 95-101 96-102 97-103
ring bonds :
1-2 1-5 2-3 3-4 4-5 42-43 42-46 43-44 44-45 45-46 51-52 51-55 52-53

53-54 54-55 60-61 60-64 61-62 62-63 63-64 69-70 69-73 70-71 71-72 72-73
78-79 78-82 79-80
80-81 81-82
exact/norm bonds :
1-2 1-5 1-87 2-3 3-4 4-5 5-37 7-10 7-112 11-12 11-17 13-15 18-19 18-20
20-21 22-23 22-24 24-25 24-26 27-29 28-36 37-38 37-41 42-43 42-46 42-93
43-44 44-45
45-46 46-48 48-49 48-50 51-52 51-55 51-89 52-53 53-54 54-55 55-94 57-59
57-58 60-61
60-64 60-66 61-62 62-63 63-64 64-97 66-68 66-67 69-70 69-73 69-95 70-71
71-72 72-73
73-90 75-77 75-76 78-79 78-82 78-84 79-80 80-81 81-82 82-91 84-86 84-85
92-98 93-99
94-100 95-101 96-102 97-103
exact bonds :
2-8 8-92 16-35 27-28 43-47 47-88 52-56 56-57 61-65 65-104 70-74 74-75
79-83 83-96
normalized bonds :
13-14 13-16

G1:O,S

G2:C,H

G3:[*1],[*2],[*3],[*4],[*5]

G4:[*6],[*7],[*8],[*9],[*10],[*11]

G5:C,N

G6:O,S,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:CLASS 8:CLASS 10:CLASS 11:CLASS
12:CLASS
13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS
23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 35:CLASS
36:CLASS 37:CLASS
38:CLASS 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:CLASS 48:CLASS
 49:CLASS
50:CLASS 51:Atom 52:Atom 53:Atom 54:Atom 55:Atom 56:CLASS 57:CLASS 58:CLASS
 59:CLASS
60:Atom 61:Atom 62:Atom 63:Atom 64:Atom 65:CLASS 66:CLASS 67:CLASS 68:CLASS
 69:Atom 70:Atom
71:Atom 72:Atom 73:Atom 74:CLASS 75:CLASS 76:CLASS 77:CLASS 78:Atom 79:Atom
 80:Atom
81:Atom 82:Atom 83:CLASS 84:CLASS 85:CLASS 86:CLASS 87:CLASS 88:CLASS
89:CLASS 90:CLASS 91:CLASS
92:CLASS 93:CLASS 94:CLASS 95:CLASS 96:CLASS 97:CLASS 98:CLASS 99:CLASS
100:CLASS
101:CLASS 102:CLASS 103:CLASS 104:CLASS 112:CLASS

L24   STRUCTURE UPLOADED

=> s l24
SAMPLE SEARCH INITIATED 15:32:56 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 444 TO ITERATE

100.0% PROCESSED 444 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

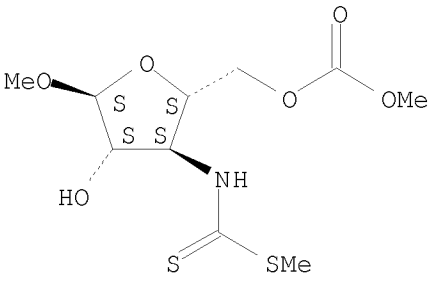
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 7616 TO 10144
PROJECTED ANSWERS: 3 TO 163

L25 3 SEA SSS SAM L24

=> d l25 scan

L25 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN α-D-Arabinofuranoside, methyl
3-deoxy-3-[[(methylthio)thioxomethyl]amino]-, 5-(methyl carbonate) (9CI)
MF C10 H17 N O6 S2

Absolute stereochemistry.



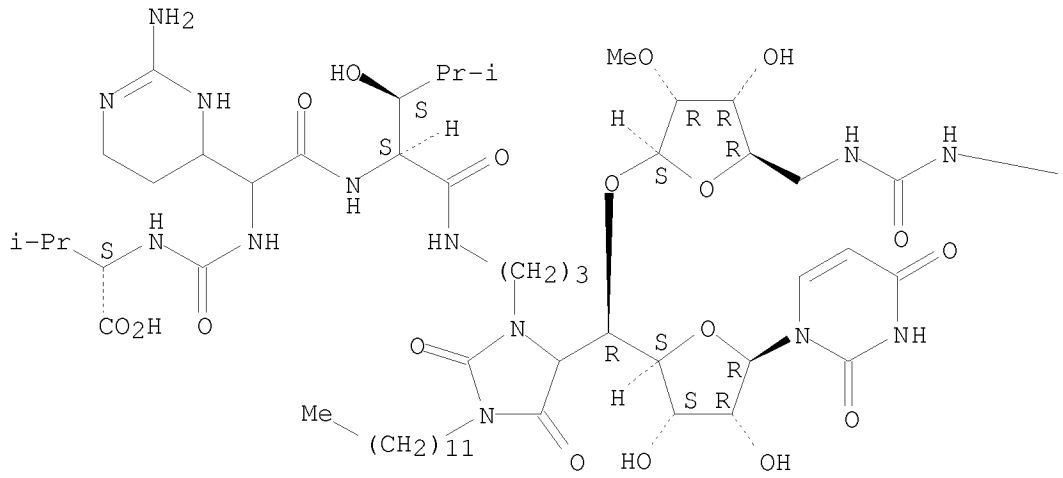
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

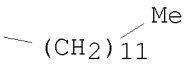
L25 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Uridine, 5'-C-[3-[3-[[2-(2-amino-1,4,5,6-tetrahydro-4-pyrimidinyl)-N-[[(1-carboxy-2-methylpropyl)amino]carbonyl]glycyl-3-hydroxyleucyl]amino]propyl]-1-dodecyl-2,5-dioxo-4-imidazolidinyl]-5'-O-[5-deoxy-5-[[(dodecylamino)carbonyl]amino]-2-O-methyl-β-D-ribofuranosyl]-, (5'R)- (9CI)
MF C64 H111 N13 O18

Absolute stereochemistry.
Currently available stereo shown.

PAGE 1-A



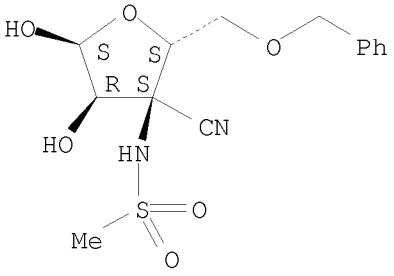
PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L25 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN α-D-Ribofuranose, 3-C-cyano-3-deoxy-3-[(methylsulfonyl)amino]-5-O-(phenylmethyl)- (9CI)
MF C14 H18 N2 O6 S

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s l24 sss full
FULL SEARCH INITIATED 15:33:14 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 9042 TO ITERATE

100.0% PROCESSED 9042 ITERATIONS 16 ANSWERS
SEARCH TIME: 00.00.01

L26 16 SEA SSS FUL L24

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	187.80	636.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-16.40

FILE 'HCAPLUS' ENTERED AT 15:33:18 ON 02 OCT 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 2 Oct 2009 VOL 151 ISS 15
FILE LAST UPDATED: 1 Oct 2009 (20091001/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

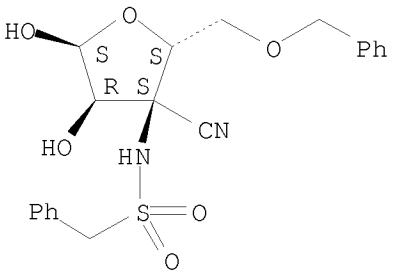
The ALL, BIB, MAX, and STD display formats in the CA/CAplus family
of databases have been updated to include new citing references
information. This enhancement may impact record import into
database management software. For additional information, refer
to NEWS 9.

=> s l26
L27 12 L26

=> d l27 1-12 ti abs bib hitstr

L27 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis and anti-HIV1 biological activity of novel 5''-ATSAO compounds
AB Aza TSAO-T derivs. bearing a substituted dihydroisothiazole dioxide ring with a Ph group at 5'' position were prepared Biol. evaluation showed that Ph group gives rise to a dramatical decrease of the inhibitory effect.
AN 2008:495446 HCAPLUS <<LOGINID::20091002>>
DN 149:118640
TI Synthesis and anti-HIV1 biological activity of novel 5''-ATSAO compounds
AU Tomassi, Cyrille; Nguyen Van Nhien, Albert; Marco-Contelles, Jose; Balzarini, Jan; Pannecouque, Christophe; De Clercq, Erik; Postel, Denis
CS Laboratoire des Glucides (UMR6219), Faculte des Sciences, Universite de Picardie Jules Verne, Amiens, 80039, Fr.
SO Bioorganic & Medicinal Chemistry (2008), 16(8), 4733-4741
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Ltd.
DT Journal
LA English
OS CASREACT 149:118640
IT 1035648-32-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and anti-HIV1 biol. activity of novel 5''-ATSAO compds.)
RN 1035648-32-8 HCAPLUS
CN α-D-Ribofuranose, 3-C-cyano-3-deoxy-5-O-(phenylmethyl)-3-[[(phenylmethyl)sulfonyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.



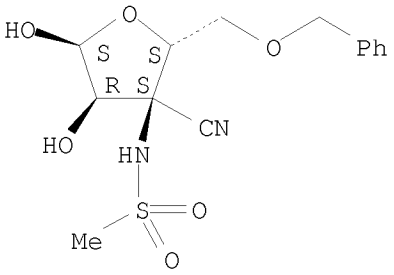
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis of AZA Analogues of TSAO
AB TSAO derivs. which were first synthesized in 1992 have shown strong inhibitory effect and selectivity against HIV-1 (Camarasa, M.J.; Perez-Perez, M.J.; San-Felix, A.; Balzarini, J.; De Clercq, E. J. Med. Chemical 1992, 35, 2721-2727). The structure-activity relationship of these derivs. has shown strong binding between the amino acids constituting the reverse transcriptase and the different pharmacophore (tert-butyldimethylsilyl group, amino and sulfonate groups of the TSAO derivs.) (Camarasa, M.J.; San-Felix, A.; Perez-Perez, M.J.; Velazquez, S., Alvarez, R.; Chamorro, C.; Jimeno, M.L.; Perez, C.; Gago, F.; De Clercq,

E.; Balzarini, J. J. Carbohydr. Chemical 2000, 19, 6403-6406). We described the synthesis of an original TSAO analog where, basically, the O-1'' atom is replaced by a nitrogen atom.

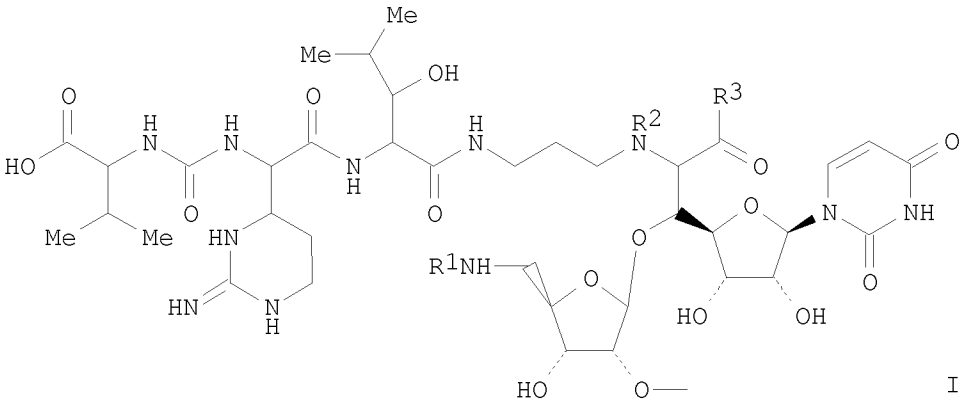
AN 2003:714312 HCAPLUS <<LOGINID::20091002>>
DN 140:228419
TI Synthesis of AZA Analogues of TSAO
AU Nguyen Van Nhien, Albert; Tomassi, Cyrille; Len, Christophe; Marco-Contelles, Jose Luis; Postel, Denis
CS Laboratoire des Glucides, Universite de Picardie-Jules Verne, Amiens, 80039, Fr.
SO Nucleosides, Nucleotides & Nucleic Acids (2003), 22(5-8), 939-941
CODEN: NNNAFY; ISSN: 1525-7770
PB Marcel Dekker, Inc.
DT Journal
LA English
OS CASREACT 140:228419
IT 668486-89-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of AZA analogs of TSAO and antiviral structure-activity relationship)
RN 668486-89-3 HCAPLUS
CN α-D-Ribofuranose, 3-C-cyano-3-deoxy-3-[(methylsulfonyl)amino]-5-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation of novel nucleoside peptide antibiotics AA-896
GI



I

AB The invention relates to antibiotic compds. AA-896 of formula I [R1 = H, aryl, (C1-C20)-alkyl, aryl-CH2, alkyl-CO, alkyl-NHCO, or aryl-NHCO; R2 = H, alkyl, aryl-CH2, or alkyl-CO; R3 = OH (R1 = R2 ≠ H when R3 = OH) or R2R3 = CONR4, where R4 = alkyl or aryl] or their pharmaceutically acceptable salts. Thus, treatment of I (R1 = R2 = H, R3 = OH) with methanol with pyridine and 2,4-pentanedione overnight at room temperature and then 4-fluorophenyl isocyanate in DMF afforded I (R1 = H, R4 = 4-fluorophenyl), which was assayed for antibacterial activity against a spectrum of Gram-pos. and Gram-neg. bacteria (MIC ≥ 32 μf/mL).

AN 2002:832769 HCAPLUS <<LOGINID::20091002>>
DN 137:338138
TI Preparation of novel nucleoside peptide antibiotics AA-896
IN Lin, Yang-I.; Li, Zhong; Francisco, Gerardo DelaCruz; McDonald, Leonard Alexander
PA American Cyanamid Company, USA
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002085867	A1	20021031	WO 2002-US13024	20020425
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002303468	A1	20021105	AU 2002-303468	20020425
	US 20030054983	A1	20030320	US 2002-131939	20020425
	US 6727232	B2	20040427		
	US 20030087874	A1	20030508	US 2002-131938	20020425
	US 6858591	B2	20050222		
	US 20030104986	A1	20030605	US 2002-132005	20020425
	US 6689763	B2	20040210		
	US 20040116334	A1	20040617	US 2003-713881	20031114
	US 7078195	B2	20060718		
PRAI	US 2001-286297P	P	20010425		
	US 2001-290140P	P	20010510		

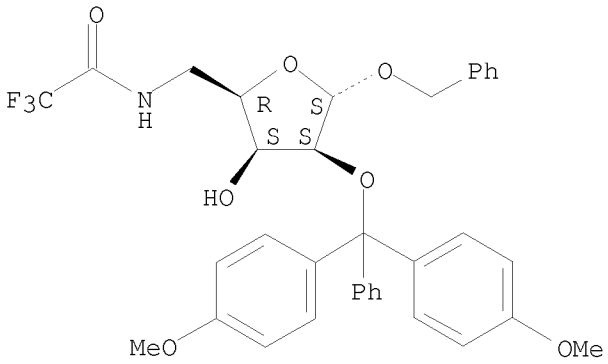
US 2001-286401P P 20010425
US 2001-286402P P 20010425
US 2001-290139P P 20010510
US 2001-290156P P 20010510
US 2002-132005 A3 20020425
WO 2002-US13024 W 20020425
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 137:338138
IT 474267-63-5P 474267-64-6P 474267-65-7P
474267-66-8P 474267-67-9P 474267-68-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel nucleoside peptide antibiotics AA-896)
RN 474267-63-5 HCAPLUS
CN Uridine, 5'-C-[3-[3-[[2-(2-amino-1,4,5,6-tetrahydro-4-pyrimidinyl)-N-[[(1-carboxy-2-methylpropyl)amino]carbonyl]glycyl-3-hydroxyleucyl]amino]propyl]-1-octyl-2,5-dioxo-4-imidazolidinyl]-5'-O-[5-deoxy-2-O-methyl-5-[[(octylamino)carbonyl]amino]-β-D-ribofuranosyl]-, (5'R)- (9CI) (CA INDEX NAME)

L27 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Muraymycins, novel peptidoglycan biosynthesis inhibitors: semisynthesis and SAR of Their derivatives
AB Sixteen muraymycin derivs. were synthesized based on selective reactions of the primary and secondary amino groups of muraymycin C1 with isocyanates and aldehydes. Disubstituted derivs. demonstrated no activity against either MraY or MurG at ≤100 μg/mL whereas mono substituted derivs. demonstrated good inhibitory activity, well correlated with the lipophilicity of the substituent introduced. In particular, the activity of derivs. substituted with C12H25 or CH2Ph was comparable to that of muraymycin C1 in this assay.
AN 2002:585102 HCAPLUS <<LOGINID::20091002>>
DN 138:39489
TI Muraymycins, novel peptidoglycan biosynthesis inhibitors: semisynthesis and SAR of Their derivatives
AU Lin, Yang-I.; Li, Zhong; Francisco, Gerardo D.; McDonald, Leonard A.; Davis, Rachel A.; Singh, Guy; Yang, Youjun; Mansour, Tarek S.
CS Chemical Sciences and Infectious Diseases, Wyeth Research, Pearl River, NY, 10965, USA
SO Bioorganic & Medicinal Chemistry Letters (2002), 12(17), 2341-2344
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 138:39489
IT 478409-90-4P
RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation, MraY and MurG antimicrobial inhibitor evaluation of muraymycin derivs.)
RN 478409-90-4 HCAPLUS
CN β-D-allo-Heptofuranuronic acid, 6-[[3-[[2-(2-amino-1,4,5,6-tetrahydro-4-pyrimidinyl)-N-[[[(1S)-1-carboxy-2-methylpropyl]amino]carbonyl]glycyl-(3S)-3-hydroxy-L-leucyl]amino]propyl][(octylamino)carbonyl]amino]-1,6-dideoxy-5-O-[5-deoxy-2-O-methyl-5-[[(octylamino)carbonyl]amino]-β-D-ribofuranosyl]-1-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-, (6ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

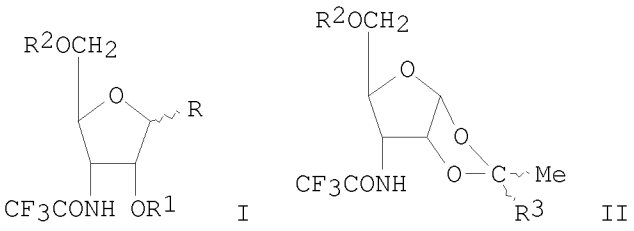
L27 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Universal solid supports for oligonucleotide synthesis
AB A symposium. Starting from 2,3:5,6-di-O-isopropylidene-α-D-mannofuranose, benzyl 5-trifluoroacetamido-5-deoxy-2-O-(4,4'-dimethoxytrityl)-α-D-lyxofuranose and 5,6-ditrifluoroacetamido-1,5,6-trideoxy-2-O-(4,4'-dimethoxytrityl)-α-D-mannofuranose were prepared and attached to a controlled pore glass to generate new universal solid supports for oligonucleotide synthesis.
AN 2000:234225 HCAPLUS <<LOGINID::20091002>>
DN 133:105246
TI Universal solid supports for oligonucleotide synthesis
AU Azhayev, Alex
CS Department of Pharmaceutical Chemistry, University of Kuopio, Kuopio, FIN-70211, Finland
SO Collection Symposium Series (1999), 2(Chemistry of Nucleic Acid Components), 129-134
CODEN: CSYSFN
PB Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic
DT Journal
LA English
IT 282716-71-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(universal pore glass solid supports for oligonucleotide synthesis)
RN 282716-71-6 HCAPLUS
CN α-D-Lyxofuranoside, phenylmethyl 2-O-[bis(4-methoxyphenyl)phenylmethyl]-5-deoxy-5-[(trifluoroacetyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Reactions of some 3-deoxy-3-trifluoroacetamido-D-ribofuranosyl halides with mercuric cyanide. Laboratory note
GI



AB Reaction of the halide I (R = Br, R1 = R2 = Bz) with Hg(CN)2 and MeNO2 gave I (R = β-cyano, R1 = R2 = Bz), whereas I (R = Br, R1 = Ac, R2 = Bz) gave II (R2 = Bz, R3 = CN). I (R = Br, R1 = R2 = Bz) was prepared by benzoylating II (R2 = H, R3 = Me), methanolysis/benzoylation II (R2 = Bz, R3 = Me, reaction of I (R = OMe, R1 = R2 = Bz) with Ac2O-HOAc, and brominating I (R = OAc, R1 = R2 = Bz). I (R = Br, R1 = Ac, R2 = Bz) was similarly obtained via I (R = OAc, R1 = Ac, R2 = Bz).

AN 1981:551031 HCAPLUS <<LOGINID::20091002>>

DN 95:151031

OREF 95:25295a,25298a

TI Reactions of some 3-deoxy-3-trifluoroacetamido-D-ribofuranosyl halides with mercuric cyanide. Laboratory note

AU Tronchet, Jean M. J.; Grouiller, Annie; Martin, Olivier R.

CS Inst. Chim. Pharm., Univ. Geneve, Geneve, 1211/4, Switz.

SO Helvetica Chimica Acta (1980), 63(8), 2258-63
CODEN: HCACAV; ISSN: 0018-019X

DT Journal

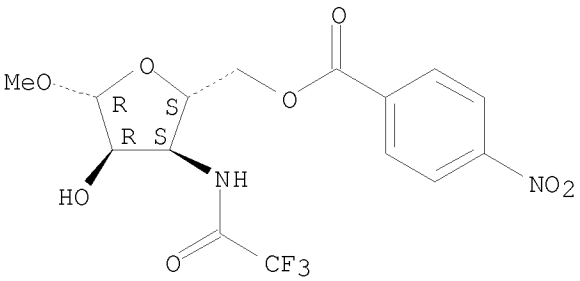
LA French

IT 29781-52-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitrobenzoyl chloride)

RN 29781-52-0 HCAPLUS

CN β-D-Ribofuranoside, methyl 3-deoxy-3-[(trifluoroacetyl)amino]-, 5-(4-nitrobenzoate) (9CI) (CA INDEX NAME)

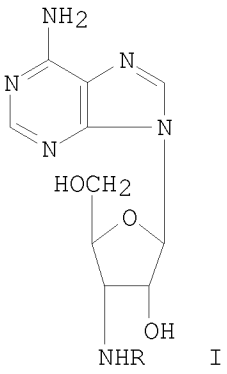
Absolute stereochemistry.



L27 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Nucleosides. XXXVI. Synthesis of 3'-homocitrullylamino- and 3'-lysylamino-3'-deoxyadenosine and their relation to Cordyceps militaris derived products

GI



I

AB Aminodeoxyadenosine I (R = H), prepared efficiently from D-xylose in a number of steps. was aminoactylated with protected amino acids and the products were deblocked to give the title compds. [I; R = H2NCONH(CH2)4CH(NH2)CO (II), H2N(CH2)4CH(NH2)CO (III)] and demethylpuromycin [I; R = p-MeOC6H4CH2CH(NH2)CO (IV)]. II was identical with the product previously isolated from C. militaris. II and III exhibited inhibition of poly(U) directed poly(U) directed poly(phenylalanine) synthesis analogous to that of puromycin, yet lower by factors of 20 and 40, resp., whilst that of IV was identical with puromycin qual. and quant.; hence the N6-Me groups in puromycin are not essential for termination of ribosomal peptide chain elongation.

AN 1979:611735 HCAPLUS <<LOGINID::20091002>>
DN 91:211735
OREF 91:34133a,34136a

TI Nucleosides. XXXVI. Synthesis of 3'-homocitrullylamino- and 3'-lysylamino-3'-deoxyadenosine and their relation to Cordyceps militaris derived products

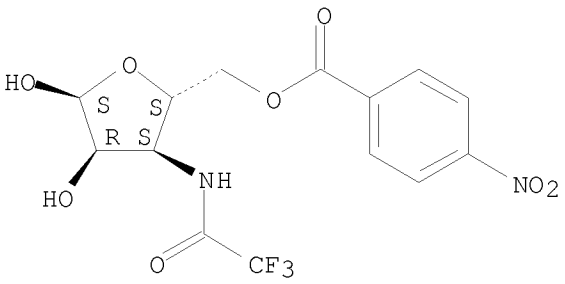
AU Lichtenthaler, Frieder W.; Cuny, Eckehard; Morino, Tetsuo; Rychlik, Ivan
CS Inst. Org. Chem. Biochem., Tech. Hochsch. Darmstadt, Darmstadt, D-6100, Fed. Rep. Ger.

SO Chemische Berichte (1979), 112(7), 2588-601
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA English

IT 71507-95-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

RN 71507-95-4 HCAPLUS
CN α-D-Ribofuranose, 3-deoxy-3-[(trifluoroacetyl)amino]-, 5-(4-nitrobenzoate) (9CI) (CA INDEX NAME)

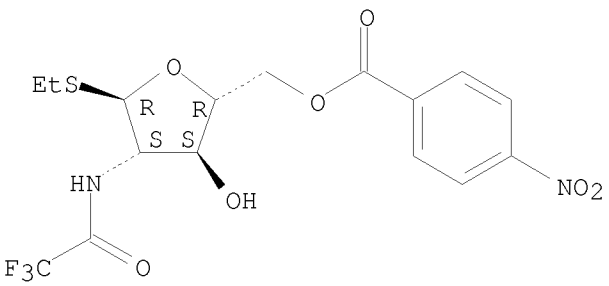
Absolute stereochemistry.



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

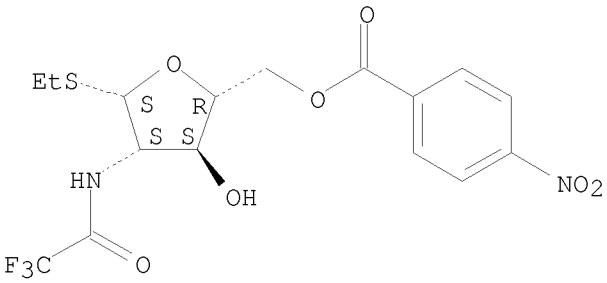
L27 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis and spectral properties of cytosine nucleosides of 2-amino-2-deoxy-α-D-arabinofuranose and -pyranose
AB Et 2-deoxy-3,5-di-O-p-nitrobenzoyl-1-thio-2-(trifluoroacetamido)-β-D-arabinofuranoside (I) was converted into the glycosyl chloride. Condensation of the latter with 2,4-dimethoxypyrimidine, followed by amination, gave 1-(2-amino-2-deoxy-α-D-arabinofuranosyl)cytosine, which was also obtained from the α-D anomer of I. Similarly, 1-(2-amino-2-deoxy-α-D-arabinopyranosyl)cytosine was prepared from Et 2-deoxy-3,4-di-O-p-nitrobenzoyl-1-thio-2-(trifluoroacetamido)-α-D-arabinopyranoside. The PMR spectra of these nucleosides, as well as those of the 1-thioglycosides, are discussed in terms of the conformation of the sugar portion. A large change of the J1,2 coupling consts. of the α-D-furanosides, according to the substituents at C-1 and C-2, was interpreted on the basis of conformational mobility.
AN 1975:479527 HCAPLUS <<LOGINID::20091002>>
DN 83:79527
OREF 83:12503a,12506a
TI Synthesis and spectral properties of cytosine nucleosides of 2-amino-2-deoxy-α-D-arabinofuranose and -pyranose
AU Wolfrom, Melville L.; Inouye, Shigeharu
CS Dep. Chem., Ohio State Univ., Columbus, OH, USA
SO Carbohydrate Research (1975), 42(2), 305-15
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
IT 56206-90-7 56206-91-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitrobenzoyl chloride)
RN 56206-90-7 HCAPLUS
CN α-D-Arabinofuranoside, ethyl 2-deoxy-1-thio-2-[(trifluoroacetyl)amino]-, 5-(4-nitrobenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



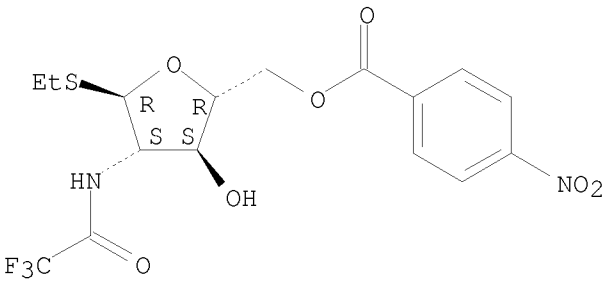
RN 56206-91-8 HCAPLUS
CN β-D-Arabinofuranoside, ethyl 2-deoxy-2-[(trifluoroacetyl)amino]-1-thio-, 5-(4-nitrobenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



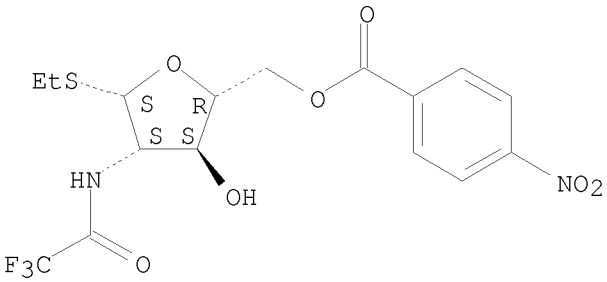
L27 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Four isomeric ethyl 1-thioglycosides from 2-amino-2-deoxy-D-arabinose
AB Et 2-amino-2-deoxy-1-thio-α- and -β-D-arabinopyranoside (I and II) were obtained by direct ethanethiolation of 2-amino-2-deoxy-D-arabinose (III), and their structures were determined by mass and PMR spectrometry. Et 2-amino-2-deoxy-1-thio-α- and -β-D-arabinofuranoside (IV and VI) were prepared by partial demercaptalation of 2-amino-2-deoxy-D-arabinose diethyl dithioacetal with HgCl2, with or without protection of the 2-hydroxyl group. Demercaptalation with HgCl2 gave the β-D anomer, and treatment with Br gave a mixture of the α and β anomers in the ratio of .apprx.1:1. Alternatively, direct ethanethiolation of III in CF3CO2H gave the α-D anomer. The structures of IV and V were determined by mass spectrometry, by direct comparison of their N-acetyl derivs. with an authentic enantiomorph, and by PMR spectroscopy. The physicochem. properties of I, II, IV, and V were compared with those of the O-glycosides of D-arabinose.
AN 1975:459211 HCAPLUS <<LOGINID::20091002>>
DN 83:59211
OREF 83:9363a,9366a
TI Four isomeric ethyl 1-thioglycosides from 2-amino-2-deoxy-D-arabinose
AU Wolfrom, Melville L.; Inouye, Shigeharu
CS Dep. Chem., Ohio State Univ., Columbus, OH, USA
SO Carbohydrate Research (1975), 41, 117-33
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
OS CASREACT 83:59211
IT 56206-90-7P 56206-91-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 56206-90-7 HCAPLUS
CN α-D-Arabinofuranoside, ethyl 2-deoxy-1-thio-2-[(trifluoroacetyl)amino]-, 5-(4-nitrobenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 56206-91-8 HCAPLUS
CN β-D-Arabinofuranoside, ethyl 2-deoxy-2-[(trifluoroacetyl)amino]-1-thio-, 5-(4-nitrobenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation of aminomercapto furanose sugars from dithiocarbamoyl derivatives
AB Me 3-amino-3-deoxy-2-thio-α-D-ribofuranoside was prepared in several steps from Me 3-amino-3-deoxy-α-D-arabinofuranoside via Me 3-deoxy-3-(dithiocarbomethoxy)-amino-α-D-arabinofuranoside and 1'-O-methyl-α-D-ribofurano-[3',2':4,5]thiazolidine using the method of Goodman and Christensen (1963).
AN 1972:405759 HCAPLUS <<LOGINID::20091002>>
DN 77:5759
OREF 77:1015a,1018a
TI Preparation of aminomercapto furanose sugars from dithiocarbamoyl derivatives
AU Goodman, Leon
CS Dep. Chem., Univ. Rhode Island, Kingston, RI, USA
SO Methods in Carbohydrate Chemistry (1972), 6, 277-81
CODEN: MCACAI; ISSN: 0097-3602
DT Journal
LA English
IT 37063-17-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 37063-17-5 HCAPLUS
CN α-D-Arabinofuranoside, methyl 3-deoxy-3-[[(methylthio)thioxomethyl]amino]-, 5-(methyl carbonate) (9CI) (CA INDEX NAME)

L27 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Cyclophosphoramides from amino sugars and amino nucleosides
AB Condensation of bis(2-chloroethyl)phosphoramidic dichloride with 9-(3-amino-3-deoxy-β-D-ribofuranosyl)-6-dimethylaminopurine gave the 2',3'-cyclic phosphorodiamidate. By an improved synthesis, Me 3-amino-3-deoxy-β-D-ribofuranoside was obtained as a model compound for conversion into the analogous 2,3-cyclic phosphorodiamidate. Existence of the latter as two diastereomers owing to P asymmetry was shown by NMR anal., using comparison with the 5-[O-(p-nitrobenzoate)] as a basis for assignments.
AN 1970:510058 HCAPLUS <<LOGINID::20091002>>
DN 73:110058
OREF 73:17927a
TI Cyclophosphoramides from amino sugars and amino nucleosides
AU Fujiwara, Allan N.; Acton, Edward M.; Goodman, Leon
CS Life Sci. Res., Stanford Res. Inst., Menlo Park, CA, USA
SO Journal of Heterocyclic Chemistry (1970), 7(4), 891-4
CODEN: JHTCAD; ISSN: 0022-152X
DT Journal
LA English
OS CASREACT 73:110058
IT 29781-51-9P 29781-52-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 29781-51-9 HCAPLUS
CN Ribofuranose, 3-deoxy-3-(2,2,2-trifluoroacetamido)-, 5-p-nitrobenzoate, β-D- (8CI) (CA INDEX NAME)

L27 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Use of a complex neighboring group to prepare amino(mercapto)furanose sugars
GI For diagram(s), see printed CA Issue.
AB The conversion of Me 3-amino-3-deoxy-α-D-arabinofuranoside (I) to Me 3-amino-3-deoxy-2-thio-α-D-ribofuranoside hydrochloride (II) using a dithiocarbamoyl neighboring group is described. The use of an alternative procedure resulted in a C-3 to C-5 neighboring group participation and ultimately yielded Me 3-amino-3-deoxy-2-O-(methylsulfonyl)-5-thio-α-D-arabinofuranoside hydrochloride (III, X =SO2Me).
AN 1963:469371 HCAPLUS <<LOGINID::20091002>>
DN 59:69371
OREF 59:12891b-c
TI Use of a complex neighboring group to prepare amino(mercapto)furanose sugars
AU Goodman, Leon; Christensen, James E.
CS Stanford Res. Inst., Menlo Park, CA
SO Journal of Organic Chemistry (1963), 28(10), 2610-13
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA Unavailable
OS CASREACT 59:69371
IT 37063-17-5P, Arabinofuranoside, methyl 3-deoxy-3-[(dithiocarboxy)amino]-, methyl ester, 5-(Me carbonate), α-D-
RL: PREP (Preparation)
(preparation of)
RN 37063-17-5 HCAPLUS
CN α-D-Arabinofuranoside, methyl 3-deoxy-3-[[(methylthio)thioxomethyl]amino]-, 5-(methyl carbonate) (9CI) (CA INDEX NAME)